

Mental health in UK architecture education: An analysis of contemporary student wellbeing

An Initial Study

by David McClean, Peter Holgate & Lyndsay Bloice

17 FEBRUARY 2020

RIBA Research Grant

ABSTRACT

This study is a review of mental health and well-being amongst students of architecture at RIBA validated UK schools. It encompasses a comprehensive literature review of student well-being and support broadly within a higher education context, as well as specifically within the subject of architecture. This is augmented by data from a brief survey of UK schools, as well as telephone interviews with selected institutions as a means of establishing current perceptions of the issue in schools, as well as providing some insight into a range of actions that are being undertaken to better support students. The study was funded by an RIBA Research Grant, and has been undertaken in light of significant media exposure to the issue coupled with anecdotal reports coming from school of architecture across the UK.

The objectives of the study were:

- To survey the current literature regarding student mental health in UK higher education, and in architecture education specifically;
- To identify policy and good practice in higher education with respect to issues of student mental health and well-being in the sector; and
- To determine in outline the extent that UK schools are experiencing and engaging with challenges associated with student mental health and well-being.

It is hoped that his project will underpin a more substantial research project which will develop guidance for architecture educators about how to support the mental health and wellbeing of students through curricular development and design, as well as by and other means.

Citation:

McClean, D., Holgate, P., and Bloice, L., Murray, I., 2019. Mental health in UK architecture education: An analysis of contemporary student wellbeing. An Initial Study. Robert Gordon University, UK

ACKNOWLEDGEMENTS

This study was undertaken between August 2018 and February 2020, and was reliant on the contributions of many, all of whom the authors wish to thank. In particular, thanks go to all the Schools of Architecture and associated Student Welfare / Support Departments that contributed to the outline survey. In addition, many thanks to all of the academic staff who contributed to the telephone interviews, a number of whom volunteered due to their belief in the importance of developing our collective understanding of the issue.

Lastly, this study would not have been possible to produce without the support of the RIBA Research Grant. Many thanks to the RIBA, and to those on the Grant selection panel that saw sufficient value in our proposal to warrant its support. We sincerely hope that the study will contribute in some small way to tackling this pressing matter, and to supporting the students on whom we rely.

David McClean and Peter Holgate

TABLE OF CONTENTS

[Abstract](#)

[Acknowledgements](#)

[Table of Contents](#)

[1 Introduction](#)

[1.1 Background context](#)

[1.2 Overview of project](#)

[1.3 Structure and scope of literature review](#)

[1.3.1 Structure](#)

[1.3.2 Scope](#)

[1.4 Literature review methodology](#)

[2 Student Mental Health and Wellbeing in Higher Education](#)

[2.1 Definitions](#)

[2.1.1 Definitions of mental health and wellbeing for the general population](#)

[2.1.2 Definitions of mental health and wellbeing for the student population](#)

[2.2 Prevalence Statistics](#)

[2.2.1 HE mental health statistics](#)

[2.2.2 Comparison with general population](#)

[2.2.3 Student numbers](#)

[2.2.4 Changing HE demographic](#)

[2.2.5 Greater public awareness and reduced stigma](#)

[2.3 Risk factors for students](#)

[2.4 Support and guidance for students](#)

[2.4.1 Current university mental health support and guidance](#)

[2.4.1.1 Services](#)

[2.4.1.2 Guidance](#)

[2.4.2 External mental health support and guidance](#)

[2.4.2.1 Services](#)

[2.4.2.2 Guidance](#)

[2.4.3 Wider response to supporting student mental health](#)

[2.4.3.1 Mental health charter](#)

[2.4.3.2 Early warning system and contacting parents](#)

[2.4.3.3 'Whole University' Approach](#)

[2.4.4 New university initiatives and service developments for supporting student mental health](#)

- [2.4.5 Universities under scrutiny](#)
- [2.4.6 Do universities need to do more?](#)
- [2.4.7 A note on reported support statistics](#)
 - [2.4.7.1 Scotland](#)
 - [2.4.7.2 Wales](#)

[2.5 Summary](#)

[3 Mental health and wellbeing in architecture education](#)

[3.1 Statistics and research](#)

- [3.1.1 Introduction](#)
- [3.1.2 Statistics on prevalence](#)
- [3.1.3 International Studies](#)

[3.2 Comparison with other professions and courses of study](#)

- [3.2.1 Creative Industries](#)
- [3.2.2 Problem-Solving](#)
- [3.2.3 Medicine](#)
- [3.2.4 Law](#)

[3.3 Architecture Education: Risk factors and Pedagogic Challenges](#)

- [3.3.1 Studio-based learning methods](#)
- [3.3.2 The Social Value of Studio](#)
- [3.3.3 Community and Socialised Learning](#)
- [3.3.4 Peer Pressure and the Culture of Competition](#)
- [3.3.5 The Role of Tutor Behaviours](#)
- [3.3.6 The 'Crit' or Review](#)
- [3.3.7 Feedback and Power](#)
- [3.3.8 Workload and Work-Life balance](#)
- [3.3.9 A Culture of Long Hours](#)
- [3.3.10 Course Length](#)
- [3.3.11 Financial Pressures](#)
- [3.3.12 Profile of Student Body](#)
- [3.3.13 Inclusivity and Equity](#)
- [3.3.14 From academia to the profession](#)

[3.4 Architecture student support](#)

- [3.4.1 Support Services](#)
- [3.4.2 Support and guidance from professional bodies, regulators, and others](#)

[3.5 Summary](#)

[4 SURVEY RESULTS](#)

[4.1 Methodology](#)

[4.2 Emergent Themes from the Literature](#)

[4.3 Survey of Academic and Support Staff: Results](#)

[4.3.1 Qualitative Responses](#)

[4.3.1.1 Workload / work-life balance](#)

[4.3.1.2 Peer pressure, staff pressure, and competitiveness](#)

[4.3.1.3 Cost of study](#)

[4.3.1.4 Learning environments](#)

[4.3.1.5 Support systems](#)

[4.3.1.6 Curricular Design](#)

[4.3.1.7 Student Profiles](#)

[4.3.1.8 Other contributory factors](#)

[4.4 Summary Discussion](#)

[4.4.1 The case for tailored mental health and wellbeing support for architecture students](#)

[4.4.2 Some Practical Ideas](#)

[4.4.3 Pedagogic or culture change](#)

[5 Conclusions](#)

[5.1 Conclusions](#)

[5.2 Further Research](#)

[6 References](#)

[Appendix One: Review of student mental health support in UK universities with RIBA validated architecture courses](#)

[Appendix Two: Survey Questions](#)

[Appendix 3: Semi-Structured Telephone Interview Questionnaire](#)

1 INTRODUCTION

1.1 BACKGROUND CONTEXT

The mental health and wellbeing of students in higher education has been a frequent topic in the media in recent years due to rising numbers of suicides (Hurst, 2018a; Weale, 2018a) and statistics which suggest increasing numbers of students seeking help from support services for their mental health and wellbeing (Bussey, 2017; Goodwin, 2017; Sarner 2017).

Universities are being called upon to do more to support students with mental health issues (Busby, 2018a; Busby, 2018b; Devlin, 2018; Morris, 2018; Vaughan, 2018; Woolcock, 2018a). This directive comes from the Universities Minister (Vaughan, op cit.; Turner, 2018a; Busby, 2018c); in England, from the head of the Office for Students – the higher education regulator (Vaughan, 2018); and from concerned parents (Steafel, 2017; Hurst, 2018b).

Some higher education institutions have been investing in support services to counter growing concerns about increasing numbers of students disclosing mental illness and requesting support (Turner, 2017a). However, there are long waiting times for mental health support in some universities (Buchan, 2018) and others question whether it is the place of universities to provide such pastoral care; or whether the NHS should bear the burden (Lightfoot, 2018). It is clear however, that there is a mounting pressure for universities to take responsibilities for pastoral care, and a number of universities are responding to this by investing in services (Woolcock, 2018b).

Architecture students are often identified as a particularly vulnerable group. If we consider the *Architect's Journal Annual Student Survey* in 2016¹ (one of the most recent years with equivalent large scale student survey results available), it showed that 26.5% of students had reported receiving support for mental health difficulties resulting from their studies, with a similar number expressing concerns that they would require assistance in the future. Thus, cumulatively, the majority of students responding to the survey had some explicit concerns about their mental health (Waite and Braidwood, 2016).

It is difficult to find directly comparable statistics with the general student population. For example, the 2016 *Student Resilience: Unite Students Insight* report “found that 12% of students and the same proportion of applicants consider themselves to have a mental health condition” (Neale et al 2016), yet a YouGov survey of Britain’s students in 2016 found that “27% report having a mental health problem of one type or another” (Aronin and Smith, 2016). This perhaps says more about the unreliability of statistics based on self-reported mental health issues than it does about actual levels of mental health issues in student populations.

Despite this overall lack of sources, consistency and reliability of data, there appears to be an emerging consensus across the sector that the state of student mental health in general is of increasing concern for higher education institutions (HEIs). More specifically, questions are being raised about the extent of the challenges in UK architecture education, and what schools can do to alleviate the challenges that current students appear to be reporting with increasing frequency.

¹ Note that the online website versions of the AJ student survey reports differ slightly from the full version of the report in the paper and digital magazine versions. For this literature review, we have largely referred to the digital magazine version.

As acknowledged by other researchers, there is a widespread lack of robust data on the prevalence of mental health conditions among students in the UK (Thorley, 2017). However, there are some statistics from HESA, student surveys, and Freedom of Information requests that relate to the percentage of students who disclose a mental health condition to their institution; levels of wellbeing in the student population; the number of students who use university counselling services; and the number of student suicides. From these data, it is possible to gain a picture of the general mental health and wellbeing of university students. These statistics will be discussed in more detail in the body of the report, but key insights and figures for the above include:

- The percentage of students who disclose a mental health condition to their HEI was 2% of UK-domiciled first-year students in 2015/16; an individual is five times more likely to disclose a mental health condition to their HEI than was the case a decade ago (Thorley, op.cit.).
- Well-being amongst undergraduate students appears to be lower than that of the remainder of the population (Neves and Hillman, 2017);
- Data obtained by the Guardian from universities using freedom of information requests shows the numbers requesting counselling had risen by a third in the last three years. Figures show that 87,914 students requested counselling in 2015-16, compared with 68,614 in 2013-14, a rise of 28% (Marsh, 2017). Additionally, “94% [of participating universities] report an increase in demand for counselling services, while 61 % report an increase of over 25 %. In some HEIs, up to 1 in 4 students are using, or waiting to use, counselling services “(Thorley, op.cit.);
- 134 students killed themselves in 2015; between 2007 and 2015, the number of student suicides increased by 79% (from 75 to 134) (Thorley, op.cit.).
- There are many contradictory figures for the percentage of students who consider themselves to have a mental health problem; alternative surveys indicate the numbers to be 12% in a Unite Students survey (Neale et al, 2016); 27% in a YouGov survey (Aronin and Smith, 2016); and 26.5% of architecture students in the AJ survey (Waite and Braidwood, 2016).

More specifically at subject level, according to the Architect’s Journal surveys, the number of students who say their course is affecting their mental health is rising (26.5% were currently being treated or had been treated for mental health in the past; compared with 32.5 % in 2017 (Braidwood and Waite, 2017) and 33% in 2018 (Jessel, 2018). The Architecture students in the 2016 survey expressed concerns about specific issues associated with studying architecture, namely the interconnected issues of the ‘long hours culture’, and the financial burden of the seven-year course (Waite and Braidwood, 2016); issues which have continued to be raised in the subsequent annual surveys. Responding to the results of the 2016 AJ Survey, Sir Anthony Seldon, Vice-Chancellor at the University of Buckingham and a mental-health campaigner responded by saying:

“Britain has a near epidemic of mental-health problems among its students. Those studying architecture appear to be under added burdens emanating perhaps from the very length of the course and time taken before earning a proper income. Much could be done to rethink the courses so they align with the architectural education needs of the future rather than the dictates of the architectural big cheeses of the past.”

(Waite and Braidwood, op.cit.).

The implications of these survey results for architecture education touch upon what Alan Dunlop, Honorary Chair in Contemporary Architectural Practice, Liverpool School of Architecture refers to as one of the most pressing issues in architecture education, namely what is taught, how it is taught, and the extent to which students should be prepared for the practice setting (Waite and Braidwood, 2016). These issues extend into the workplace, with many employers expressing concern about the current state of architecture education. For example, Rowan Parnell, Operations Director, Architecture Initiative, responded to the 2016 survey noting that the mental health challenges experienced by architecture students are apparently the result of ‘stressful course structures’ as well as the financial concerns emanating from the combination of course fees and living expenses (Waite and Braidwood, op.cit.).

The AJ Survey 2016 figures will be scrutinised in more detail in the body of the literature review, as this survey remains one of the few sources of data on UK architecture student mental health and wellbeing. However, a Masters level dissertation researched and written in 2018 by an architecture student from the University of Sheffield, supported by the RIBA and Architects’ Benevolent Society, offers some valuable analysis and insights. The results of this research reveal that 33% of architecture students currently regard themselves to be suffering from mental health difficulties. Moreover, in comparing the RIBA Survey of 2017 with a broader survey conducted by the National Union of Students (NUS), architecture students were found to record a higher incidence of distress against every symptom (Kirkpatrick, 2018). However, the study also found that architecture students are “13% more likely to say they have told friends about their mental distress”, something that is attributed to the subculture of studio, and the social dynamic that it facilitates. It was also reported that students frequently refer to the attitudes or behaviours of their tutors as being contributory factors to their distress, with a significant belief that normative cultures within architecture are detrimental to well-being, with issues of personal sacrifice and long working hours being commonly reported. (Hohenadel, 2018).

1.2 OVERVIEW OF PROJECT

In the midst of media coverage and widespread anecdotal information within the community of UK Schools of Architecture, this project aims to conduct an evidence-based perspective on the issue of student mental health, utilising the combination of a literature review, an outline survey of all UK Schools of Architecture (and their institutional Student Support departments) and semi-structured telephone interviews with key architecture educators involved with issues of pastoral care. It is hoped that the final report will evidence the need for a larger follow-up project that will aim to produce guidance on supporting architecture students’ mental health and wellbeing as well as to provide suggestions for potential pedagogic and curricular change.

1.3 STRUCTURE AND SCOPE OF LITERATURE REVIEW

1.3.1 Structure

The literature review initially provides background to the current context around student mental health and wellbeing by: defining the terms of mental health and wellbeing; discussing statistics across the UK; discussing the prevalence of poor mental health, risk factors, and treatment barriers; and summarising some of the support services available for students both within and beyond the university context.

The second section looks into these issues more specifically in the context of architecture education by referencing available statistics on prevalence of mental health issues; comparisons with other disciplines; aspects of the pedagogies of architecture education; risk factors and pedagogic challenges for architecture students; and initiatives relating to tailored support services.

Finally, there is a discussion of salient points arising relating to the challenges within the student body, gaps in data identified, and nascent solutions that the study has revealed from its engagement with schools of architecture. A concluding section summarises the key findings of the study and suggests next steps.

1.3.2 Scope

With respect to the mental health and well-being of its students, there is a dearth of information relating specifically to architecture education in the UK. This study addresses the UK context but, where appropriate, refers to relevant studies and statistics beyond this national focus. While the literature review is primarily concerned with architecture students and research into and support for their mental health and well-being, where comparisons can usefully be made with other disciplines, these have been also been included. This approach is in-line with other reports on architecture students' mental health, that have referenced the same data sets discussed here and have offered comparative statistics for other closely related disciplines (Karklins and Mendoza, 2016; Ison, 2017). In support of this review, much of the existing data available is 'grey' literature, perhaps due to the lack of peer-reviewed outputs on the topic. Additionally, where statistics are reported here, it is emphasised that much of this data is based on small-scale surveys; as such, comparisons with larger surveys of the wider student population may be divergent.

A gender dimension also emerges within the discussion around mental health and students, with most studies and statistics showing higher levels of disclosure of mental illness in female students than male students (2.5% compared with 1.4% of first year students in 2015/2016); however, there are higher suicide rates in young males than amongst females². While reference to gender disparities are made at relevant points throughout this literature review, this complex issue may deserve a separate future investigation.

1.4 LITERATURE REVIEW METHODOLOGY

Information sources employed within this review were accessed via a variety of databases, indices, and peer-reviewed journal articles. collected Databases employed included:

- EBSCO Host Database: Art & Architecture Source
- Avery Index to Architectural Periodicals
- Google Scholar

The following search terms in various combinations were used: Mental health; wellbeing; student; studio; depression; anxiety; stress; architecture.

A Google search was performed to establish mental health charities in the UK and to enable a search of their documents for any specific guidance for students. A LexisNexis search was performed to gather media coverage of the topic. There were no time parameters set, and the search terms used

² Across all age groups, men are three times more likely to die by suicide than women, but both men and women aged under 30 are the least likely to die by suicide, compared to older males and females (ONS, 2016)

were as above. A list of the UK-based architecture schools was compiled, and their webpages were searched for evidence of specific guidance on mental health for architecture students. A Google search was also performed to establish any mental health help and guidance for architecture students beyond individual universities (e.g. professional bodies).

2 STUDENT MENTAL HEALTH AND WELLBEING IN HIGHER EDUCATION

This section gives an overview of some of the most pertinent definitions, statistics, prevalence factors, treatment barriers, and support and guidance for students (with some reference to the wider population for comparison). This is an extensive topic area, with many interrelated facets, but a summary of the current status of mental health and well-being in the wider HE student population is given here to provide context. While architecture students have a different university experience in aspects of their education to that of many other students, the nature and setting of teaching and learning holds commonalities with several subject areas. Nevertheless, the specificity of architecture education and its potential impact on the mental health and well-being of students, is explored in section 6.

2.1 DEFINITIONS

This section is broken down into two subsections. Firstly, diagnostic classifications of the disorders relevant to this literature review are given alongside definitions of mental health and wellbeing for the general population. Secondly, definitions of mental health and wellbeing in relation to the student population are discussed.

2.1.1 Definitions of mental health and wellbeing for the general population

The World Health Organization (WHO) compiles an 'International Classification of Diseases' (ICD) which is the international standard for reporting diseases and health conditions. This is the diagnostic classification standard for clinical and research purposes. From the most recent version of the classification (ICD-11), the disorders relevant to this literature review would largely be from the following categories: 'Mental, behavioural or neurodevelopmental disorders'; 'stress disorders'; and 'burn out' (WHO, 2018a).

The first of these, (mental, behavioural or neurodevelopmental disorders) is a broad category containing a wide range of disorders. Subcategories include 'mood disorders', which include 'bipolar and related disorders'; and 'depressive disorders' amongst others. Equally relevant would be the 'anxiety or fear-related disorders' subsection, which includes: 'generalised anxiety disorder' and 'panic disorder' as well as various phobia disorders (ibid).

Another section of the classification deals with stress disorders. These are largely related to external triggers and the severity of these disorders varies. Stress disorders relevant to this literature review would be 'adjustment disorder' which is a maladaptive reaction to a stressor or multiple stressors (e.g. conflicts at home or work, divorce etc) and usually resolves within 6 months if the stressor is managed; and 'burn-out' which usually results from chronic workplace stress (ibid).

There are several types of depressive disorders listed and they are:

“characterised by depressive mood (e.g., sad, irritable, empty) or loss of pleasure accompanied by other cognitive, behavioural, or neuro-vegetative symptoms that significantly affect the individual’s ability to function.” (ibid)

Bipolar or related disorders are:

“episodic mood disorders defined by the occurrence of Manic, Mixed or Hypomanic episodes or symptoms. These episodes typically alternate over the course of these disorders with Depressive episodes or periods of depressive symptoms.” (ibid)

Anxiety or fear-related disorders are:

“characterized by excessive fear and anxiety and related behavioural disturbances, with symptoms that are severe enough to result in significant distress or significant impairment in personal, family, social, educational, occupational, or other important areas of functioning. Fear and anxiety are closely related phenomena; fear represents a reaction to perceived imminent threat in the present, whereas anxiety is more future-oriented, referring to perceived anticipated threat.” (ibid)

Disorders specifically associated with stress are:

“directly related to exposure to a stressful or traumatic event, or a series of such events or adverse experiences. For each of the disorders in this grouping, an identifiable stressor is a necessary, though not sufficient, causal factor. Although not all individuals exposed to an identified stressor will develop a disorder, the disorders in this grouping would not have occurred without experiencing the stressor. Stressful events for some disorders in this grouping are within the normal range of life experiences (e.g., divorce, socio-economic problems, bereavement³). Other disorders require the experience of a stressor of an extremely threatening or horrific nature (i.e., potentially traumatic events). With all disorders in this grouping, it is the nature, pattern, and duration of the symptoms that arise in response to the stressful events—together with associated functional impairment—that distinguishes the disorders.” (ibid)

And, finally, burn-out is:

“a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterised by three dimensions: 1) feelings of energy depletion or exhaustion; 2) increased mental distance from one’s job, or feelings of negativism or cynicism related to one’s job; and 3) reduced professional efficacy. Burn-out refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life.” (ibid)

WHO defines mental health as: “a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.” They draw attention to their constitution which states that health is not merely the absence of disease or infirmity, and therefore mental health is more than just the absence of mental disorders or disabilities (WHO, 2018b).

Mind, a mental health charity in England and Wales, state that: “good mental health means being generally able to think, feel and react in the ways that you need and want to live your life” and that

³ On the Holmes and Rahe stress scale, divorce and bereavement are in the top five key stressors and would not usually be classified as ‘normal’. See Holmes and Rahe (1967).

the inverse of this, poor mental health means that: “you might find the ways you're frequently thinking, feeling or reacting become difficult, or even impossible, to cope with” (Mind, 2018)

The Mental Health Foundation, another charity that operates across the UK, defines someone in good mental health as being able to capitalise upon their potential, cope with everyday situations, and make a full contribution in family, work, and community contexts. They also note that the term ‘mental health’ is often used inter-changeably with ‘emotional health’ or ‘well-being’. Importantly, however, they note that mental health is not a constant, noting that individuals are all different, with varying levels of resilience that also vary over time, through changing circumstances, and at different stages of one’s life (Mental Health Foundation, 2018).

2.1.2 Definitions of mental health and wellbeing for the student population

In terms of student mental health in the UK, the NHS considers the incidence of mental health issues amongst students to be equivalent to that in the general population. It also observes that support such as counselling can be beneficial for students even if they don’t have a diagnosed mental condition, particularly as one’s normal life circumstances can challenge many, and the ability of students to discuss and receive counselling helps them understand their situation more deeply as well as assisting in developing coping strategies (NHS, 2016).

The NHS advises that while occasional feelings of anxiety, stress, or mild depression are normal for most people, students should seek help if such feelings affect daily activities over a prolonged period. NHS guidance advises that the signs of depression and anxiety for students include “*feeling low; feeling more anxious or agitated than usual; losing interest in life; and losing motivation*”. They also state that some people “*put on or lose weight; stop caring about the way they look or about keeping clean; do too much work; stop attending lectures; become withdrawn; and have sleep problems*” (ibid).

In its good practice guide for student mental well-being in higher education, Universities UK states that mental health “...encompasses the emotional resilience that enables us to enjoy life and to survive pain, disappointment and sadness, and an underlying belief in our own, and others’ dignity and worth. It also allows us to engage productively in and contribute to society or our community” adding that it is “*quite possible to have a good sense of mental wellbeing and yet be living with a diagnosed mental illness*” (Universities UK, 2015).

Universities UK acknowledge some of the triggers of mental health difficulties can affect students significantly, particularly as many are navigating a point of major transition in their lives. Life events such as relationship breakdown or bereavement can give rise to symptoms, but so too can the more general challenges that are commonly associated with leaving home. Importantly, a number of these triggers have the potential to arise at any time (ibid).

This organisation provides a definition of mental illness as a condition “*arising from organic, genetic, psychological or behavioural factors (or combinations of these) that occur in an individual and are not understood or expected as part of normal development or culture – can be acute or chronic, and may fall within the definition of a ‘disability’ contained in the Equality Act 2010. It is important for institutions to bear in mind, however, that not all mental health difficulties will constitute a ‘disability’ under the Equality Act.*” (ibid).

They also note that just because study at university may increase levels of stress, this does not always have negative consequences:

“It is also important to note that some level of stress does not necessarily have to have a negative impact and can be stimulating. Engaging in higher education can also make a positive contribution to mental wellbeing in that it:

- *provides a structured and purposeful environment*
- *provides opportunities for academic and personal achievement leading to a fuller sense of identity and increased self-esteem*
- *offers the opportunity to learn to manage multiple demands and build confidence*
- *can reduce isolation and provide opportunities for new friendships*
- *provides opportunities for exercise, creativity and community involvement and contribution.” (ibid)*

The association posits a balancing act between mental health and mental ill-health, acknowledging the responsibility of institutions to facilitate the pursuance of opportunity for students whilst also providing the support structures for students who, for whatever, reason, display vulnerability during their studies. This interest in doing so is stated as being societal, extending well beyond the bounds of institutions. Consequently:

“Many institutions are reviewing their current offering for students to ensure it is promoting self-agency, resilience and independence in an academic community and not based on a ‘deficit’ model where only students who reach crisis point are offered support.” (ibid)

2.2 PREVALENCE STATISTICS

2.2.1 HE mental health statistics

Student Minds, a mental health charity specifically for UK scholars, acknowledges that there is *‘considerable variability in prevalence statistics’* for students but that students constitute a particular risk group in terms of developing mental health problems, as well as in encountering challenges in accessing suitable support. Student Minds claims that approx. 29% of UK students experience mental health difficulties over the course of their studies (Student Minds, date unknown). Universities UK (op. cit.) similarly point to statistics that show that there are more students with clinical mental health difficulties at university than previously recorded, but frame this as a positive development; historically, many of these students may have been excluded from higher education opportunities.

More recently, the Institute for Public Policy Research (IPPR, 2017) reported a similar trend, adding that, in its estimation, statistics were showing a higher prevalence of mental health issues in students than that amongst the wider population. Data indicates that the disclosure of mental health difficulties amongst first year students had increased by approximately 500% on 10 years. The correlation was also drawn between the upward general trend, and the increasing incidence of

student withdrawal from study and, in the most extreme cases, of suicide (Thorley, 2017). The IPPR figures on disclosure (students who have formally told their institutions that they have a mental health issue or illness) were widely reported in the press, alongside stark figures regarding university dropouts and suicide. From the data available for 2015, a record number of students were shown to have withdrawn from tertiary education whilst, in the same period, 134 students took their own lives, the highest ever recorded to date (Sarner, 2017).

The IPPR's research has become a key reference point for those inquiring into student mental health, and some of the key findings are summarised as follows:

2% UK-domiciled first-year students at HEIs in the UK disclosed a mental health condition in 2015/16, compared with 0.4% in 2006/07

17% of disabilities disclosed by first-year students were mental health conditions in 2015/16 compared with 5% in 2006/07

Undergraduates are more likely than postgraduates to disclose a mental health condition (2.2% compared to 1.4%) (2015/16).

Just under half of students who report experiencing a mental health condition choose not to disclose it to their HEI. (Thorley, op.cit.)

With brief reference to the differences in gender, the IPPR state that:

"In England, 19 % of 16–24-year-olds experience a mental health condition, up from 15% in 2003. Among this age group, 28% of women experience mental health problems, compared to 10% of men. This difference between the sexes is also evident in Scotland, Wales and Northern Ireland." (ibid)

Of particular relevance to this study are the reported statistics regarding young people and mental health. The IPPR states that 62% of students who enrolled in the UK higher education system in 2015/16 were under 25 years of age, including around 89% of all undergraduate enrolments. Statistics relating to the prevalence of mental ill health issues within this age group are particularly interesting to compare with the student population. The IPPR found that the 16 to 24 year- old age group is particularly prone to experiencing mental health challenges when compared to the equivalent group in previous generations (ibid).

Multiple studies have reported that a high proportion of people experience their first mental health challenges before the age of 25. As more young people choose to go to university than ever before, with widening access creating more opportunities for students from diverse backgrounds to attend universities, higher education increasingly reflects the socioeconomic and demographic profile of UK society (ibid).

Further studies have echoed the findings of the IPPR report. Surveys and statistics suggest that most higher education institutions are acknowledging increasing reports of stress and anxiety among their students and that young people in the UK appear to have the poorest mental well-being in the world, *"with the exception of Japan"* (Sarner, op. cit.).

In commenting on the 2016 student Academic Experience Survey, the CEO of student mental health charity 'Student Minds' stated that the survey demonstrated evidentially that the incidence of

mental health problems amongst undergraduate students exceeds that of the wider populace. Moreover, the fact that approx., 33% of these students reporting psychological distress correlates with the fact that the average age of undergraduate students corresponds with the age at which individuals are most likely to experience the onset of mental health challenges (ibid).

However, as mentioned previously, there is a high degree of variability between the statistics available; direct comparison is precluded as data have been collected through alternative methods and / or are based on small populations of students. Nevertheless, surveys and studies consistently indicate a growing trend for students to experience mental distress; as a chiefly young demographic, this occurs at a particularly vulnerable time of students' lives.

2.2.2 Comparison with general population

NHS England states that 25% of adults and 10% of children experience mental illness (NHS England, 2018), while the Scottish Government states that mental health represents one of the greatest public health challenges in Scotland. According to the Scottish Government, approx. 33% of the population is estimated to be affected by mental illness in any one year (Scottish Government, 2018). Although this might suggest that poor mental health is more prevalent in Scotland than in England, there is similarly a great deal of variance between research methods, sample sizes and demographics. As an illustration, a 2016 report on the 'fundamental facts' of mental health in Scotland by the Mental Health Foundation suggested that the actual figure for Scotland was "one in six" who report symptoms of mental health conditions (or 15%) (Mental Health Foundation, 2016). In essence, estimates of those who are suffering, but haven't reported, can only be estimates drawn from 'suggested' rates of non-reporting.

Conclusions can still be drawn regarding comparisons to be made between students and the general population. As reported by the IPPR, it appears that students are at higher risk of developing mental health issues relative to their wider age group as a result of combined academic, social, and financial demands. This is evidenced by the high incidence of mental health challenges being reported by students, coupled with higher education institutions measuring significant increases in the demand for student support services, including counselling (Thorley, op. cit.). This trend is echoed by the Education Policy Institute (EPI) who state that "75% of mental health problems are established by the age of 25" (Johnson, 2018). In addition, it has been consistently shown that contemporary students experience a greater incidence of mental health challenges than statistics show for their age group in previous generations:

"Young adults aged 20–24 are less likely than any other age group to record high levels of wellbeing (life satisfaction, feeling that things done in life are worthwhile, happiness and low anxiety). In 2017, less than 1 in 5 students reported high levels of each of these four key wellbeing indicators." (Thorley, op. cit.)

It is important to point out here that the rising numbers of students seeking support (see Section 2.4) may not necessarily indicate rising levels of mental ill health and poor wellbeing. There are a number of 'prevalence factors' to consider, which could be an influence on the numbers of students seeking support.

2.2.3 Student numbers

Universities UK (2017) reported that despite substantial growth in enrolments in full-time first degrees, postgraduate taught, and postgraduate research courses over the preceding decade (by 31.2%, 30.5% and 25.7% respectively), enrolment numbers to part-time first degree and postgraduate taught courses had declined. Data indicates that the total number of students enrolled at UK universities had not significantly changed between 2006-07 and 2015-16 (approx. 2.3 million). However, the nature of the student body had changed. Changes included an increase in the number of younger students, female students, and students that were non-UK domicile. With respect to the nature of studies, full-time, first degree and postgraduate taught courses represented a larger proportion of courses enrolled on than in 2006–07. Data indicates that demand for non-degree and part-time study has continued to decline, especially amongst mature students (ibid).

2.2.4 Changing HE demographic

There are now a greater number of younger students, female students and international students at UK universities compared with figures from a decade ago. Additionally, figures show that there is an increase in school leavers enrolling on undergraduate courses who come from geographic areas with low historic levels of participation in higher education (ibid).

HESA figures also show increases in numbers across three of their widening access markers (with numbers of students in receipt of Disabled Student's Allowance (DSA) showing a slight decline in the last couple of years compared with an overall rising figure for the decade before), and that the number of higher education students who are from low participation neighbourhoods has increased i.e. students whose parents did not attend university; or are from a state-funded school or college (HESA, 2018)

According to the Education Policy Institute (EPI), whilst mental health issues can be found in all socio-economic groups, individuals from socially disadvantaged or deprived backgrounds are at 'substantially higher' risk of experiencing a common mental disorder (CMD). With respect to gender, the EPI also report that women are almost three times more likely than men to experience a common mental disorder (Johnson, 2018). All these factors combined suggest a rationale for recent reports of sharp rises in demands for mental health services at universities, and in the number of student suicides. However, does the rise in media attention, and the subsequent response from universities and regulatory bodies may also be regarded as a prevalence factor.

2.2.5 Greater public awareness and reduced stigma

In interpreting the growth trends noted above, the Education Policy Institute has questioned whether the rise in statistics may instead be the result of an increase in disclosure and requests for help due to a greater level of public awareness and the reduced stigma associated with mental health. To counter this argument, the EPI points to the concomitant rise in student suicide figures, citing a strong link between mental health issues and suicides. Statistics indicate that 90% of suicides and suicide attempts are associated with a psychiatric disorder, suggesting that increased student suicide rates (a rise of 52% since 2000-01), coupled with more general statistical trends, indicate that both disclosure and prevalence of mental health issues are rising among student populations (ibid).

2.3 RISK FACTORS FOR STUDENTS

There are a number of factors that may increase the likelihood of becoming mentally unwell or having a low level of wellbeing, these being referred to as 'risk factors'. These can be broadly categorised as financial; age-related; or transition issues. However, there are also factors relating to the pedagogies prevalent in architecture education, that may place some students at risk. Universities UK (op. cit.) highlights the impact of financial issues on student mental health, citing *"managing changed financial circumstances, including living on greatly reduced incomes or taking out loans for the first time"* as a particularly challenging transition, and one which could worsen existing or trigger new mental health conditions. The particular manifestation of such issues in architecture education is discussed in section 6.

One of the most challenging aspects of university for young people is the significant transition and change experienced from a number of different perspectives. While Universities UK acknowledge that mental health difficulties can beset a student at any point in their academic career, the underlying causes differ between individuals, and demonstrably extend beyond their higher education experiences. Specific aspects of the higher education experience and environment can induce stress for some, and the concurrence of transition to university study with transitions in an individual's broader life can prove challenging, especially during the early stages of their course. Many students are likely to be experiencing and negotiating significant changes in their lifestyle at a time when they are also adjusting to new study patterns, experience, and educational approaches.

Universities UK (op. cit.) cite several changes to students' lifestyles that can be extremely challenging. For example, in addition to new financial pressures, many new students may be experiencing separation from family and friends for the first time, an unfamiliar location, or a cultural mix that is beyond their life experience thus far. Furthermore, they may have to balance responsibilities as a parent or carer, or the financial need to work while concurrently studying for a degree. For international students, there are the additional challenges posed by language, cultural norms, unfamiliar learning modes and practices, and the pragmatic considerations relating to registering with authorities, banks, the health service, and so on. The issue of registering with a doctor and dentist has been noted as a particular issue in relation to mental health. The NHS (2016) stress the importance of continuity of care in their advice to students, highlighting the importance of students registering with a GP and / or consulting the welfare services provided by their host institution. Figures relating to discontinuity of care as a result of the transition to university were reported by the Guardian. They suggest that geographical issues of health care continuity may be compounded by the transition from child to adult services:

"Even students who have previously sought help may find the move to university makes access more complicated, as they move from adolescent to adult support services. According to a report by the Joint Commissioning Panel for Mental Health, a third of students who had access to child and adolescent mental health services (CAMHS) found their care was interrupted in the transition to university. Nearly a third more lost access to their support altogether" (Sarner, op. cit.)

There are multiple barriers to treatment with respect to mental health disorders faced by students. For example, where students do not disclose mental health conditions to their educational provider, they are not able to access the Disabled Student's Allowance and receive the support of the

disability services at their institution. Issues of mental health and well-being encompass a broad variety of disorders, experiences, and challenges and many students require a different kind of help to that which they have previously experienced. Universities UK acknowledge this variety of support needs, recognising that some students may not wish or need to disclose. Analysis by the IPPR suggests that non-disclosure is a choice made by many students for a variety of reasons; just under 50% of students who report experiencing a mental health problem choose not to disclose it to their HEI (Thorley, op. cit.).

There have been a number of peer-reviewed studies looking at the relationship between stigma and disclosure in university students. A Student Minds (undated) report on the *'Grand Challenges in Student Mental Health'* found that "fear of being judged" was the number one such challenge. However, it is acknowledged that, as there has been greater media focus on mental health in recent years, general perceptions of mental health's stigma may have diminished.

Finally, the impact of social media on the mental health of students is worthy of mention. Again, this is a large and complex topic with many interrelated factors to consider, but a recent newspaper article has quoted a 'university chief' as 'blaming social media for mental health issues' (Vaughan, 2018). It is beyond the scope of this study to delve into this topic too deeply, but it is interesting to consider the impact on mental health of 'the cult of perfectionism' that surrounds social media, with particular reference to the aims of architecture education.

2.4 SUPPORT AND GUIDANCE FOR STUDENTS

In 2016-17, there were 162 higher education institutions in the UK, of which 146 were Universities UK members, with 2.32 million students studying at those institutions (UUK, 2019). As this study concerns the mental health and wellbeing of architecture students specifically, this was the primary focus of the literature search. However, in researching information on student support specific to architecture, several university-wide initiatives were identified that warrant mention. These are presented as an indicative guide to the kinds of support available, and accordingly this study does not constitute a comprehensive review of all mental health and wellbeing initiatives being implemented across the UK higher education sector.

Although mental health has been a pressing matter for universities in recent years, not all academics believe that it is Higher Education's role or responsibility to provide mental health services. There are questions about the ability of universities to provide adequate pastoral care, or whether it is more appropriate for the NHS to bear this burden. Universities including Hull, Wolverhampton, and Essex have elected to outsource counselling services, either in whole or in part. Despite assertions by those institutions that this approach effectively expands available services, some critics have expressed concern that students in most need may lose out on appropriate care (Lightfoot, 2018). Alan Percy, Chair of the British Association for Counselling and Psychotherapy interest group Heads of University Counselling Services, responded to reports of this development by commenting:

"If, after a 'wellbeing' review a university is employing fewer trained and qualified counsellors than previously, then that is a cut. If, after a review of support services, students have to get counselling from an ex-external provider not embedded into the university that is a cut. If students have to get counselling from the already overstretched and underfunded NHS services, that is a cut. And if students are

offered telephone or online counselling without the option of a face-to-face meeting with a counsellor, then that is yet another cut." (Lightfoot, 2018)

The following section begins by giving a brief overview of the support and guidance universities are currently offering. Additionally, a brief overview of the types of external support and guidance available for students (and which universities often signpost when students ask for help) is also given. The response to the 'student mental health challenge' is discussed next, both from outwith and within institutions. Finally, there is a short note on reported statistics, in order to provide a sense of the media narrative around this issue.

2.4.1 Current university mental health support and guidance

2.4.1.1 Services

As can be seen in Appendix One (a summary of the review of mental health services provided by universities with RIBA-validated architecture courses), many of the university services for mental health exhibit common features. This is an informal overview of some of the services mentioned by universities and should not be seen as comprehensive. The results of the survey and telephone interviews which are discussed in Section 4.3 provide an illustration of mental health support services provided in specific institutions. For reference, additional information is summarised on the Student Minds website⁴.

Corresponding with the NHS guidance for student mental health referred to earlier, these services typically include:

1. Counselling and cognitive behavioural therapy (CBT) with qualified counsellors and psychotherapists;
2. Mental health advisers who can signpost to services and help facilitate access to support;
3. Mental health mentor support
4. Student-led services (often through the union) such as peer mentoring
5. Online self help (NHS, 2016)

Counselling services are usually offered free to students enrolled at UK universities. Most of the services are regarded as 'short term', with universities offering between one and six counselling sessions with support provided for a finite amount of time (although Disability Support and DSA may continue for longer). At several universities, students are offered guidance and advice through web pages dedicated to the issue of mental health and well-being, including guidance regarding appropriate points where students are advised to engage with the services offered through the NHS, initially through referral from their GP. In addition, institutions typically have mechanisms for adjustments to be made as appropriate with respect to students sitting examinations, coursework submissions, etc. Depending on their circumstances, students may also have the opportunity to apply for a Disabled Students' Allowance (DSA) (NHS, 2016).

A summary review of mental health services (see Appendix One) also revealed some additional support services available at UK universities. Many had 'wellbeing advisers' on campus that focus on 'living well'. Most universities with such appointments run workshops dealing with global aspects of mental health, and maintaining a sense of wellbeing while studying. Often these are lifestyle-

⁴ See: <https://www.studentminds.org.uk/supportatyouruniversityandfurther.html>

orientated, examples being workshops on yoga, time management, and friendship groups. Services offered by some universities include phone and text lines, several being outsourced, but some with dedicated lines to the mental health staff on campus. Some services offer 24-hour access, but the majority are limited to office hours and by appointment. Institutions also commonly offered online support, most of which was outsourced, but a few had been developed by the universities working in partnership with mental health organisations. At least one university had developed an app specifically for the use of their own students.

A significant feature of the mental health and wellbeing services provided was the provision of a drop-in function, where students could start accessing help and support by getting assessed in triage, or by discussing potential support with an adviser. Additionally, some universities appeared to be offering group or workshop therapy, however, the dominant service mode was one-to-one, and in person. This is broadly in line with the support mentioned by Brown (2018), in her Editorial for a special issue of the Journal of Mental Health. She notes that “*counselling is the most consistently offered intervention*” but questions the capacity of counselling services (especially one-to-one) to cope with large student numbers, suggesting the need to look into alternative approaches and methods of delivery. Computerised interventions such as online cognitive behavioural therapy (CBT) and mindfulness are offered as alternatives, but it is noted that “*take-up is low, and drop-out rate high*” for these interventions (ibid). She also adapts a WHO model of support for the university context, recommending the following hierarchy:

“Level 1 support (Self-care – or readiness for university for students with varying levels of distress). Example support: Budgeting and cooking skills; university Friendship skills; Coping with academic demands (e.g. time management, essay skills, sleep); Emotional coping skills.

Level 2 support (Informal university/personal support for Students with varying levels of distress). Example support: Friends; Social support via university societies with some offering talks on mental health issues; Family.

Level 3 support (Structured university support for students with varying levels of distress). Example support: Personal tutors; Study and wellbeing skills; Peer support or Buddy system.

Level 4 support (University support services for students with more severe or diagnosable problems). Example of support: Counselling; Disability services; Computerised therapy.

Level 5 support (External specialist support for Severe problems requiring specialist care). Example support: Specialist mental health services” (ibid)

Brown (ibid) also makes additional mention is made of some of the alternative or ‘novel’ therapies offered at universities, such as animal assisted therapies which are being adopted by a number of institutions.

2.4.1.2 Guidance

The institutions reviewed within this study deliver RIBA validated architecture courses, with many offering online information relating to different types of mental health issues commonly encountered, and the range of institutional and wider support offered. These sites typically also

provide signposting to other support, particularly the emergency services, for those with severe mental difficulties, or those in danger of taking their own lives.

Many institutions outsource the production of general guidance documents to mental health charities or similar agencies. However, some have developed guidance specifically for their students, working in collaboration with mental health charities to develop tailored guidance documents. For example, Student Minds work with over 120 universities in the UK⁵.

In terms of institutional support, a network of mental health professionals coordinate guidance and training for mental health advisers based in UK universities. The University Mental Health Advisers Network, (UMHAN) was established in 2003 as an information-sharing network for mental health specialists working in Higher Education. It brings together mental health advisers working in higher education dedicated to providing practical support to students experiencing mental health difficulties (UMHAN, 2018).

2.4.2 External mental health support and guidance

2.4.2.1 Services

The NHS recommend that students refer themselves to their GP for more serious or chronic conditions, as they can access specialist support through this channel (NHS, 2016). However, amidst general concerns about pressures on the capacity of the NHS, a claim by the Educational Policy Institute was reported, that 133,000 young people were turned away by the NHS in 2019 (Coughlan, 2020). This assertion was refuted by the NHS, but this claim indicates potential tensions existing between the HE sector and the NHS with respect to where responsibility lies for shouldering the increasing burden on resources that the growing incidence of mental health cases represents.

Students Minds⁶ describe a range of emergency contacts, recommending that if a student is feeling desperate or distressed they should contact the Samaritans⁷ who are accessible around the clock. For medical help, they echo the NHS guidance and suggest booking an emergency GP appointment. They also signpost NHS 111 in England and Wales and NHS 24 in Scotland for urgent, out of hours medical advice. Lastly, they suggest that those seeking immediate medical help or attention call 999 or visit the Accident and Emergency Department of their local hospital. Students Minds also signpost *Nightline*⁸, a student listening service which is open at night and run by students for students; this service is similarly recommended by many universities on their support pages. Other online services include:

*Big White Wall*⁹: A digital mental health support service which is available online around the clock, and which is an anonymous peer support community. Professionally trained ‘wall guides’ monitor the community. The service is free for 6 months in some NHS areas and for some UK universities who have signed up for the service.

⁵ See: <https://www.studentminds.org.uk/charterfags.html>

⁶ See Student Minds ‘find support’ page for all their emergency contact suggestions: <https://www.studentminds.org.uk/findsupport.html>

⁷ See: <https://www.samaritans.org/how-we-can-help-you/contact-us> for contact details.

⁸ See: <https://www.nightline.ac.uk/about-nightlines/>

⁹ See: <https://www.bigwhitewall.co.uk/>

*Feeling Good*¹⁰: A ‘positive mental training’ app, approved by NHS digital and available for university students at those UK HEIs that have subscribed to the service. The app is free to download, and comes with several preloaded audio tracks, with further audio tracks being available for purchase.

*Silver cloud*¹¹: This offers secure, immediate access to online CBT programmes, tailored to the individual’s specific needs. Some universities have signed up to the service and link to the app on their wellbeing pages (with personalised landing pages for each university). The app is also available via NHS referral.

2.4.2.2 Guidance

As previously mentioned, Student Minds provide comprehensive advice on support for students along with guidance documents not just for students, but also for friends, parents, or guardians wishing to assist¹². The charity offers a range of detailed guides relating to different aspects of balancing mental health at university, covering issues of transitions; starting university; exam stress; LGBTQ+; self-care of mental wellbeing; study years abroad; student finance; mind matters newsletters; supporting family members; and coping with student life¹³. Additionally, Student Minds offer a peer support programme and provide related workshops¹⁴. Student-run guidance includes the ‘Students Against Depression’¹⁵ site, which has practical advice on managing mental health conditions at university. The Mental Health Foundation and Mind, both UK-based mental health organisations, signpost website visitors to Student Minds publications on the topic, and *Save the Student*¹⁶ also provides a comprehensive guide to student mental health.

Publications like The Times Higher Education supplement and The Guardian have also featured articles on student mental health, offering some practical advice for students. The Guardian in particular published a guide in August 2018 entitled: ‘*Mental health at university: know where to find support*’, which offered guidance and suggested eight ways for student well-being at university, as follows:

“You won’t necessarily make friends in the first week. Look out for student societies and activities where you’ll meet like-minded people.

If you’re struggling with friendships, or pressures of work, or missing home, speak to your university’s student support services - they will have wellbeing advisers who can help you.

If your university has mental health advisers, they will be able to help you with practical things like arranging extensions for coursework.

Talk to other people about how you’re feeling, including friends and personal tutors - don’t bottle it all up. Ask your friends, too, how they’re feeling. A culture of openness about mental health is important.

¹⁰ See: <http://www.foundationforpositivementalhealth.com/listen-now/download-our-app-feeling-good/>

¹¹ See: <https://apps.beta.nhs.uk/silvercloud/>

¹² Again, available on their ‘find support’ page <https://www.studentminds.org.uk/findsupport.html>

¹³ Available from: <https://www.studentminds.org.uk/resources.html>

¹⁴ See: <https://www.studentminds.org.uk/supportforme.html>

¹⁵ See: <https://www.studentsagainstdepression.org/about-us/>

¹⁶ See: <https://www.savethestudent.org/save-money/health/mental-health-at-university.html>

You don't have to spend all your time at university. There's no harm in going home at weekends if you're missing your family.

Self-care is important. Make sure you're getting enough sleep and eating proper meals, rather than snacking or relying on takeaways - and don't drink too much.

If you have an existing mental health condition, disclose it before you start, so your university can prepare to offer you the support you need. You may also qualify for a disabled student allowance.

If you think you have a serious mental health problem, go to your GP as soon as you can - don't hope it will just go away.” (Thomas, 2018)

2.4.3 Wider response to supporting student mental health

Of several developments aimed at responding to the challenge of managing student mental health and wellbeing at universities, three key interventions have been the establishment of a Student Mental Health Charter, early alert systems, and the opportunity for parents and guardians to opt-in to such alerts regarding student issues. These have been implemented by the Office of Students. Additionally, a senior academic has been appointed in Scotland with the specific remit of looking at mental health services for students, with the pledge of additional counsellors being provided. These represent steps towards a ‘whole university’ approach to mental health support.

2.4.3.1 Mental health charter

The ‘Student Mental Health Charter’ is a “*voluntary award and quality improvement scheme which will recognise universities with exceptional approaches to promote and support the mental health and wellbeing of students and the university community.*”¹⁷ The Charter is a joint development by Student Minds, UPP Foundation, the Office for Students, the National Union of Students, and Universities UK. In tandem, the Office for Students has launched a £6 million challenge to universities to come up with new ways of improving mental health, and has funded a guide for colleges on preventing student suicides¹⁸.

In Scotland, Professor Pamela Gillies, Principal of Glasgow Caledonian University, has been appointed to look at the provision of mental health services in the sector. The aim is to provide around £250,000 over three years to develop the NUS Think Positive Campaign to ensure all higher education institutions in Scotland have a Student Mental Health agreement in place (Eadie, 2018).

2.4.3.2 Early warning system and contacting parents

In recent years, there have been growing calls to permit universities to contact parents and guardians when they have critical concerns about a student. Higher education institutions currently have to adhere to strict protocols of confidentiality that are based in legislation, rendering them unable to share student records with parents without student consent. The former minister for universities, Sam Gyimah, stated his belief that universities should be allowed to act ‘*in loco parentis*’ (Tobin, 2018), initiating potential for an opt-in system, where students can give permission for the university to contact their parents or guardians in an emergency (Weale, 2018). Some universities have already signed up to the scheme. Bristol University, where 11 students have died over the

¹⁷ See: <https://www.studentminds.org.uk/charterfaqs.html>

¹⁸ See: <https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/new-competition-funding-to-support-student-mental-health/>

course of two years, recently reported that 94% of students had opted into a system of giving mental health alerts to parents. The University of West of England, also in Bristol, operates a similar system (Fazackerley, 2018). Parents of students who have taken their own lives have expressed concern that they had been unaware their child was ill or had asked for help (Woolcock, 2018c).

2.4.3.3 'Whole University' Approach

Universities UK describe the need for a 'whole university' approach to the question of student mental health, which they describe in their '#stepchange' framework¹⁹ as:

*"Leaders of schools, colleges, universities and community organisations [to] take a whole organisation approach to the mental health of their students, young people and staff, so that it permeates every aspect of their work and is embedded across all policies, cultures, curricula and practice"*²⁰.

The IPPR has also recommend a whole university approach suggesting that the matter becomes both a sectoral and governmental priority, with the emphasis placed on '*promotion and prevention, early intervention and low-level support, responding to risk and crisis management, and referral into specialist care*'. The IPPR further assert that the ability of institutions to support the issue is too variable at present, with potentially too much variation in the extent to which universities are equipped to meet this challenge. It has therefore been suggested that any sectoral approach should require the complementary resource of NHS provision and 'new government initiatives' to ensure that no student is disadvantaged through lack of support (Thorley, 2017).

2.4.4 New university initiatives and service developments for supporting student mental health

Given the currency and profile of student mental health as a challenge, new initiatives and service developments continually emerged during the course of this study. An overview follows to evidence the range and scope of ongoing developments, but limitations concerning the comprehensiveness of this study must be acknowledged given the speed with which initiatives are being introduced.

Some universities are developing systems to facilitate students in accessing help, often through a single port of call for enquiries (Sarner, op.cit.). Others are developing support platforms such as online chat forums (East Anglian Daily Times, 2018). UWE Bristol's well-publicised *Mental Wealth First* strategy incorporates a variety of new measures including investing in an improved offer on campus; engaging parents and carers in the strategy; their *#LetsTalkNow* campaign; curriculum design developments; offering a mental health module for students; enhanced induction processes; the creation of a Global Centre for International Students; enhanced learner analytics; an academic personal tutor toolkit; staff development opportunities; and staff support²¹. Comparatively, the University of Worcester has developed a '*Suicide Safer*' initiative, a multi-agency project that brings together local NHS Trusts, local authorities and third sector organisations in a "coordinated approach to suicide prevention" (Evesham Journal, 2018)

¹⁹ See: <https://www.universitiesuk.ac.uk/policy-and-analysis/stepchange/Pages/framework.aspx>

²⁰ See: <https://www.universitiesuk.ac.uk/policy-and-analysis/stepchange/Pages/whole-university-approach.aspx>

²¹ <https://www2.uwe.ac.uk/services/Marketing/about-us/pdf/Policies/Mental-Wealth-Strategy.pdf>

2.4.5 Universities under scrutiny

With the increased prominence of mental health in public discourse, Universities are coming under greater scrutiny for their mental health support provision. For example, the Guardian published a guide to aid students in establishing which universities in the UK are *'taking student mental health seriously'*, noting that *"no university league table yet includes a measure of pastoral services on offer, and gives some advice for potential applicants"* (Tobin, 2018). However, the TAB, an online resource representing the voice of students, has recently produced such a ranking, rating universities based on the quality of provision of their mental health support²². The Guardian suggests a range of ways that applicants can check whether prospective universities 'take mental health seriously' including visiting the well-being and student support stand at open days, observing the prominence of signs and literature promoting phone lines, counselling, and other services, talking with current students, looking at commentary on social media, and consulting online forums such as Student Room (Tobin, 2018).

2.4.6 Do universities need to do more?

In September 2016, the Higher Education Policy Institute (HEPI) stated that funding for *'counselling and other support services needs to be increased threefold at a minimum'*, adding that in some institutions, funding for counselling services is currently less than £200,000 (Brown, 2016). In the face of considerable media attention and public concern around mental health, the backlash for higher education institutions that appear to be standing still or reducing services can be substantial. For example, following changes by the University of Bristol to residential support on campus, which many students perceived as a reduction in support provision, a student protest march took place (Busby, 2018). This policy had been enacted after several suicides at the University had been widely reported in the media. Professor Hugh Brady, Vice-Chancellor of the University of Bristol, responded by saying that mental health was a top priority for the institution and that: *"from this September, a team of 24/7 professionals providing pastoral care will be introduced in the halls of residence at Bristol University, alongside a team of wellbeing advisers in academic schools."* (Busby, 2018c). Appraising these events from the perspective of prevention, Student Minds advocate the pursuit of a greater degree of *"mental health literacy"*, a topic that is not typically addressed within the secondary school system, possibly giving rise to many students struggling to differentiate between *'normal everyday emotions'* and psychological manifestations for which they would benefit from seeking treatment (Thomas, 2018).

2.4.7 A note on reported support statistics

As aforementioned, multiple surveys and data sets have indicated that the numbers of students asking for help at universities in the UK is rising overall. Largely, these figures focus on England and more general 'UK' statistics. Figures for Scotland and Wales are more difficult to find. The following sections summarise media coverage of Freedom of Information requests concerning the numbers of students seeking support for mental health related issues. These are presented here mainly as a review of current media discussion with respect to university provision of mental health support, and caution is urged about the use of these figures for comparative purposes.

²² See: <https://thetab.com/2017-mental-health-rankings>

2.4.7.1 Scotland

In Scotland, statistics compiled by the Liberal Democrats in 2017 showed that in the previous 5 years, 45,724 students sought help from university counselling services across Scotland (Bussey, 2017). A further breakdown of these figures reveals that:

“The universities of Edinburgh and Glasgow reported the highest demand, with 8,105 and 9,308 students respectively seeking help over the period according to the figures, which were obtained under Freedom of Information. Across Scotland 9,382 students sought counselling from their university in 2016/17 - down from the total of 11,981 recorded the previous year, but up from 6,002 in 2012/13.” (ibid)

However, figures compiled by the BBC data unit through Freedom of Information (FOI) requests in 2018, show the number of students accessing counselling in Scotland's universities has increased by approximately 68% over the past 5 years (Hashemi, 2018), and that whilst approximately 7,000 students sought help in 2012-13, this has escalated to around 11,700 in 2016-17. This increase exceeded the overall figure for the UK of 53% for the same period. It is unclear what has caused the disparity in figures, however, the report also claimed through FOI that only 12 of the 19 Scottish HEIs, had recorded numbers students seeking help over the 5 year period (ibid). This lack of participation in the reporting of statistical data makes it difficult to obtain an accurate picture of the true extent of students across the sector who have accessed support for their mental health.

Regardless of the incomplete data, Scottish universities have been increasingly investing in mental health services for students. The Herald newspaper reported that between 2012/13 and 2016/17, institutional budgets for on-campus mental health services, including facilities such as helplines and wellbeing officers, increased by 23%, from £2.49 million to £3.06 million (McArdle, 2018). This is in the context of a decline in real terms public funding over the same timeframe. The Herald coverage of these figures recorded that the greatest increase in demand for student services had been experienced by Edinburgh University, with numbers increasing from 1,493 students in 2012/13 to 3002 in 2016/17. However, a substantial increase in funding for pastoral support was also reported over the same period, up from approx. £617,000 to £1.04m (ibid).

Beyond the Scottish 'central-belt', it was reported that universities in North-East Scotland have seen a rise of approximately 30% in the numbers of students accessing mental health services over the past three years. The figures for both Aberdeen University and Robert Gordon University showed that the number of students seeking help had increased from 942 (from both institutions) in 2014-15, to 1201 in 2016-17 (McCann, 2018). In response, the Scottish Government has promised to deliver 80 new counsellors across institutions (McArdle, op. cit.). Once again, some commentators have questioned whether it is the role of universities to deliver such care. David Lott, Deputy Director of Universities Scotland, has said that while universities demonstrate commitment to student support, clinical care remains the responsibility of the NHS and that, therefore, effective partnership with the NHS is critical (ibid).

2.4.7.2 Wales

In Wales, newspapers report rising numbers of students accessing mental health services at university, however, the statistics for occurrences have been similarly different according to the various media outlets. For example, the Western Mail reported that 1698 students of Cardiff University sought counselling support in 2017, increasing by 258 from the previous year. At

Aberystwyth, numbers increased from 333 to 2,308 within the course of 2 academic sessions, and at the University of South Wales they increased from 316 in 2010/11 to 830 in 2016-17 (Wightwick, 2018a). The Director of Student Services at Swansea University was reported by the Western Mail to have stated that numbers of students consulting wellbeing and support services had increased over 20 fold from 80 in 2011 to 1,700 in 2016. Over the same period, Cardiff University reported that numbers accessing its counselling and wellbeing services rose more than 3 fold from 1,187 in 2013 to 3,694 in 2016-17. Aberystwyth and Cardiff Metropolitan universities, whilst reporting a rise in numbers, did not make statistics available (Wightwick, 2018b). It is therefore questionable whether these figures are being mis-represented in the press, or whether different data sets refer to different figures, or whether universities are insufficiently clear about how many students they are supporting through their mental health service provisions.

2.5 SUMMARY

Definitions of mental health and well-being cover a broad range of conditions, some long-term and chronic, others more transient but potentially equally impactful on the individual. This section has sought to provide a state-of-the-art overview of the wider context for this inquiry, identifying a progressive rise in reported numbers of students seeking mental health interventions, as well as a concomitant increase in media attention, university responses, and policy initiatives. In the face of widespread media publicity, sector responsiveness to the issue appears to be increasing although, at this juncture, the approaches, methods and accessibility of mental health support systems are variable and inconsistent at subject, departmental, and institutional levels. The Office for Students lead on the development of a Mental Health Charter, a project undertaken with a number of organisations including the National Union of Students (NUS) and other agencies, provides a potential framework towards consistency in offer across the higher education sector. In similar fashion, Universities UK introduction of their ‘#stepchange’ framework also seeks to promote comparable models of whole organisation approaches to the provision of mental health support.

With respect to the focus of this inquiry, it is currently difficult to substantiate whether the incidence of mental health challenges in UK architecture schools is higher than the average prevalence across higher education. This is compounded by the variable methods of reporting adopted across the national universities and institutions, including considerable regional differences. Standardised and comparable methods of data collection could provide sizeable benefits in establishing the scale of the issue and the benchmarking of universities’ performances. In architectural education, given the comparatively long duration of study, the cost of study including ‘incidental’ costs, and widespread concerns regarding future ability to repay debt, it could be predicted that the prevalence of mental health issues in the student body could well be higher than normative sector levels across institutions. The following section seeks to establish whether there is credible and substantiated evidence to demonstrate that the mental health of students of architecture is already a significant issue that concerns many educators.

3 MENTAL HEALTH AND WELLBEING IN ARCHITECTURE EDUCATION

3.1 STATISTICS AND RESEARCH

3.1.1 Introduction

The literature on architect students' mental health and wellbeing generally appears to be highly subjective, with very little output that has been either peer reviewed or methodologically rigorous. Furthermore, data on the mental health and wellbeing of UK architecture students is sparse. In contrast, there is an abundance of anecdote and supposition, and this divergence forms part of the motivation for conducting this study. A committee paper written in 2016 for the Architects Registration Board (ARB), raised the subject of the mental health and wellbeing of architecture students. The paper notes the lack of any comprehensive survey of the mental health of students undertaking studies on the qualifications prescribed by the ARB, but also notes the availability of several data sources which may shed light on the issue (Ison, 2017). The paper acknowledges the surveys conducted by the Architects' Journal and the National Union of Students (NUS surveys), observing their value in promoting debate on the matter while also noting their limitations: *"they cannot replace the robust dataset resulting from a government commissioned survey"* (ibid). Ison notes that the 2014 survey revealed that 37% of adults in England aged 16-24 with conditions such as anxiety or depression, were accessing mental health treatment and that while *"we cannot be certain of the exact percentage of students on prescribed courses with mental health problems... we can conclude that the number is likely to be significant, as is the case with the general UK adult population"* (ibid).

Consistent with this absence of robust data, there is a dearth of contemporary academic peer-reviewed studies into the subject of the mental health and wellbeing of architecture students, especially within the UK context. The following provides a brief overview of studies that have addressed these issues (some not peer-reviewed); however, a number of these studies are somewhat dated and the majority focus on institutions and student populations out-with the UK. Despite these limitations, this Chapter interrogates a number of key themes arising from the available data, as well as from the more global discussion in the previous chapter, as follows:

- The issue of prevalence in an attempt to ascertain if there is any legitimate evidential basis for considering architecture students to be at greater risk than their peers studying other subjects;
- A brief comparison with other similar disciplines and similarly taught courses of study; and
- The pedagogies of architecture education from the perspective of student mental health and well-being

3.1.2 Statistics on prevalence

The Architect's Journal Surveys represent one of the few available sources of data on architecture students' mental health and wellbeing in the UK. Hence, for the purposes of this study, they are considered as the primary source of statistical information. The survey has been running for several years, but only sought data on mental health-related matters from 2016 onwards. Hence, relevant data exists only for 2016 (Waite and Braidwood, 2016) 2017 (Braidwood and Waite, 2017) and 2018 (Jessel, 2018). Unfortunately, however, the AJ does not publish the full results, and their summary

articles of the survey responses focus on different questions each year, discussing them from slightly varying perspectives.

The main AJ Survey question is the following: *'Have you sought help for stress or mental health related issues as a result of your course?'* This differs from national student surveys mentioned earlier which either asked students to report whether they have a mental condition and, if so, which one (Neale et al, 2016), or simply asked if respondents suffer from a 'mental health problem' (Aronin and Smith, 2016). Both questions assume that respondents perceive their experience to relate to mental health, which is not assured. Moreover, the AJ Survey question excludes pre-existing conditions, as well as the development of symptoms as a result of external circumstances which may be coincident with studies. It could be argued that there is also a tacit assumption that respondents will be able to clearly determine the sources of their issues, which could be complex and multi-faceted.

Bearing in mind these limitations, these surveys nevertheless indicate an increased number of participants seeking help for stress or mental health-related issues that they perceive to result from their course. Compared over 3 consecutive years, the number of respondents reportedly being treated rose from 6.5% in 2016, to 9% in 2018. Additionally, the number of respondents who reported seeking help in the past rose from 20% in 2016 to 24% in 2018. Those respondents who answered either *'yes, I am currently being treated'* or *'yes, I have sought medical help in the past'* gave a combined percentage of 26.5% in 2016, 32.5% in 2017, and 33% in 2018. A subsequent question, which appears to have been included in the 2017 survey only, asked participants *'has your university offered you any help or support to cope with mental health issues?'* A third of respondents said their university had offered some help, while a quarter said that *'it had been neither good nor bad'*. Concerningly, 16% of respondents said their university had not offered much support, while 18% said their institution had offered none at all.

In May 2017 and March 2018, a student survey was sent to (RIBA) validated architecture schools in the UK to try to assess the scale of the issues of student mental health and wellbeing. 1200 students completed the 2017 survey, and over 900 in 2018 (RIBA, 2018a). The findings of this work reveal that 33% of architecture students currently regard themselves to be suffering from mental health difficulties, this being significantly higher than the societal norm. Moreover, in comparing the RIBA Survey of 2017 with a broader survey conducted by the National Union of Students (NUS), architecture students were found to record a higher incidence of distress against every symptom (Kilpatrick, 2018). This is perhaps the most compelling evidence that the situation amongst architecture students is even more acute than amongst the general population of students in higher education. The study also found that architecture students are *"13% more likely to say they have told friends about their mental distress"*, something that is attributed to the subculture of studio, and the social dynamic that it facilitates. It also reported that students frequently refer to the attitudes or behaviours of their tutors as being contributory factors to their distress, with a significant belief that normative cultures within architecture are detrimental to well-being, with issues of personal sacrifice and long working hours being commonly reported (Kilpatrick, 2018).

3.1.3 International Studies

A Turkish study specifically examined burnout levels and personality traits in architectural students. Celik and Oral (2013) found that *"'emotional exhaustion' was observed together with 'neurotic' personality traits of students"*. They use the Maslach Burnout Inventory, which measures burnout

according to three different dimensions: “emotional exhaustion”, “cynicism” and “reduced personal accomplishment”. Emotional exhaustion is described as *“a chronic state of physical and emotional depletion... [when] people feel drained and used up without any source of replenishment. They lack enough motivation to face another day or another person in need.”*. Cynicism (or depersonalisation) is defined as *“a negative, cruel or excessively detached response to other people, and it often includes a loss of idealism. It usually develops in response to the overload of emotional exhaustion in form of a self-protection by putting an emotional buffer with other individuals.”* And finally, reduced personal accomplishment refers to *“a decline in one’s self competence and productivity at work. A growing sense of inadequacy is experienced about one’s own personal ability to help people, and this may result in a self-imposed verdict of failure.”* (ibid).

Overall, Celik and Oral determined that the sample students appeared to have low levels of burnout, but that first and third year students showed higher levels of emotional exhaustion. They suggest first year issues emerge from the transition in which students adapt to student life as well as to the demands of their course. Equally, they propose that emotional exhaustion is prevalent in third year students because students undertake three high-stakes projects in the syllabus, signifying that *“these two years require a more intense working tempo”* (ibid).

Another Turkish study in 2009 sought to examine the *‘prevalence of depression, its correlates among students, and its effects on health-related quality of life in a Turkish university’*. While architecture students are included in this study, they have unfortunately been grouped with engineering students and results relating to the discipline cannot be isolated. More than 40% of the participants were from the school of engineering and architecture. Overall, the prevalence of depression was 21.8%, and within the School of Engineering and architecture, the percentage with depression was 22.5%. However, as a comparator, the School of Economics students were reported as having a higher incidence of depression (25.8%), whilst the School of Science and Literature recorded a figure of 18.6% (Arslan, 2009).

In this literature review, the only substantive literature review to emerge on the topic of architecture and mental health was conducted by Karklins and Mendoza in 2016 for the New South Wales Architects Registration Board in Australia. Unfortunately, this study did not publish relevant statistics on the prevalence of mental health issues in architecture students or professionals, with the focus being upon individuals in practice. However, it cites a relevant University of Toronto study (Whelan, 2014), and references the report of the AIAS Studio Culture Task Force (Koch et al, 2002).

3.2 COMPARISON WITH OTHER PROFESSIONS AND COURSES OF STUDY

This section of the study focuses on studies that are perhaps best placed to enable comparisons to be drawn between with the mental health and wellbeing status of architecture students and those of some other disciplines. Three of these studies look at interior design students (Smith and Lilly, 2014; Smith and Lilly, 2016; Alawad and Slamah, 2014), and one focuses on the relationship between stress and creative problem-solving projects (Gomez-Lanier, 2018). Other inquiries relevant to the topic of mental health and wellbeing in architecture have drawn upon broader disciplines, and these will also be considered. Due to the lack of systematic research into the specificities of mental health and wellbeing in architecture education, it has been necessary to draw on research into parallel professions and courses of study. Precedent for this inclusion has been provided by the Ison’s committee paper for the Architect’s Registration Board, (2017), and Karklins and Mendoza’s (2016)

literature review for the NSW Architects Registration board in Australia; both inquiries have made relevant comparisons with other professions in order to discuss potential mental health and wellbeing issues for architects.

3.2.1 Creative Industries

Karklins and Mendoza (2016) compare architecture with other creative industry professions: *“Whilst this literature review is addressing the mental health concerns facing architects, there currently exists a dearth of research in regards to this profession specifically. However, given that architecture is a creative industry, mental health in creative industries in general was examined.”* Karklins and Mendoza argue a case for architecture to be classified with creative industries such as: *“Advertising, Arts, Crafts, Design, Fashion, Film, Gaming, Music, Television, Radio, Performing Arts, Publishing and Software”* (ibid). One could argue that this list (produced with reference to a 2002 paper on creative industries) could now be updated to include graphic design and computer applications beyond gaming. Indeed, the UK Department for Culture Media and Sport more recently referred to nine creative industry economy groups: advertising and marketing; architecture; crafts; design: product, graphic and fashion design; film, TV, radio and photography; IT, software and computer services; publishing; museums, galleries and libraries; and music, performing and visual arts” (Department for Culture, Media and Sport, 2015).

What is clear, is that the term ‘creative industries’ can encompass a vast range of professions, each with unique working conditions, practices and cultures. For the wider purposes of this study, it may however be relevant to discuss perceived and potential links between people in creative occupations and mental illness. Karklins and Mendoza (op. cit.) make reference to several papers which have examined these links and suggests that *“those in creative industries may be more likely to suffer mental health issues”*. These authors refer to studies that have asserted that patients with specific disorders such as schizophrenia or bipolar disorder (and, interestingly, their relatives) are over represented in creative populations (Kyaga et al 2011)²³ With reference to these inquiries, Karklins and Mendoza state that *“the culture of working in architecture, and creative industries in general, could play a role in mental health”* (2016). In contrast, some commentators from the psychiatric community assert that it is *“difficult to answer whether there is a relationship between creativity and mental illness”* (Fisher, 2015), given the methods employed and the populations studied thus far. This literature review therefore makes no substantiated case for architects being predisposed to mental illness due to their engagement within a creative profession.

Nevertheless, Karklins and Mendoza view creativity as an important discussion point in the conversation about architects and their mental health, primarily because *“creativity is a primary reason as to why students enter the architect field (Sang et al., 2014), however, research suggests the reality of working life does not fulfil this desire due to the amount of administrative work (Sang, Ison, Dainty, & Powell, 2009)”* (ibid). Future research could perhaps test this assertion, by asking architecture students if ‘creativity’ was a primary driver in their study choice, and whether this has evidenced any effect on their mental health and wellbeing, either through pre-disposition or through their learning journey. Smith and Lilly (2014) attempted to gain an understanding of interior

²³ However, the same authors then conducted a study which indicated that those in creative industry occupations were no more likely to suffer from other psychiatric disorders – such as “unipolar depression, anxiety disorders, alcohol abuse, drug abuse, autism, ADHD, anorexia nervosa, and completed suicide” – than control populations. (Kyaga et al, 2013)

architecture students' experience of stress while studying a creative discipline. They found that: *"Learning situations are not inherently negatively stressful for contemporary university students",* however *"comparatively, some learning situations are more stressful than others",* and *"where situations are negatively stressful, expectations were often involved";* also, *"miscommunication was often involved"* and that *"the more mechanistic course aspects, such as clarity in project presentation requirements, consistency in grading criteria and scales, and reliability of access to resources and electronic management systems, can influence levels of frustration and respect for the unit or staff member, and therefore, students are more likely to become dissatisfied, frustrated or stressed"* (ibid).

This echoes the findings of the University of Toronto study, which found that architecture students *"recognized their largest sources of stress as being 'workload, lack of organization from the faculty, coinciding deadlines, and negative interactions with members of the faculty'"* (Whelan, 2014). It could be argued that students' stresses resulting from heavy workloads are compounded by a lack of clarity in project requirements, as well as inconsistency of tacit and explicit requirements from teaching staff. As noted by Holgate and Jones (2011), managing expectations and workloads becomes an important facet of managing stress.

Smith and Lilly's (2011) research is of particular value in the context of this literature review, in that it looks at the particular stressors of different elements of education, including the design studio. Smith and Lilly conclude that no one element of interior architecture was inherently stressful for the study participants, rather, there was variation between the reactions of some students, with some having very negative stressful experiences. They found that many students named multiple reasons for feeling 'negatively stressed', the top responses being: *"when there was a lack of time to complete work satisfactorily"* (23% of respondents), *"lack of clarity of expectations"* (20%) and lack of sleep (17%) due to staying up late to complete work when submissions are due. The next two items, *"workload or feeling overloaded"* (8%), and *"having assessments due too close together"* (8%), also related to time pressures mitigating against satisfactory completion of assignments. Furthermore, Smith and Lilly offered contrasting evidence for when stress acts 'in a positive way'. For example, 29% of responses claimed stress acted in a positive way: *"[when] I worked well under pressure or working to a tight deadline", "When excited at the start of a project, course or topic in the unit";* and *"When passionate about the subject (particular projects and units named)"* (Smith and Lilly, 2011).

In a later paper, Smith and Lilly (2016) make recommendations based upon their previous findings, suggesting that primarily miscommunication between educators and students appeared to cause stress in interior architecture student participants, and that: *"implicit meanings of both educator and student need to become explicit through critical reflection by each academic"*. Smith and Lilly assert that their findings should inform *"staff and curriculum designers involved in all creative professional courses such as design, architecture, performance, film, and IA"* (Smith and Lilly, 2016). The particular impacts of pedagogical approaches is discussed in the later sections, particularly with respect to architecture's key approaches of studio learning and the crit.

3.2.2 Problem-Solving

Gomez-Lanier's (2018) study into the role of stress on the creative process of problem-solving²⁴ projects involved interior design and fashion merchandising students. Findings indicated that: *"The*

²⁴ While it is acknowledged that 'problem solving' represents a limited definition of design and the design process, the findings of this study are nevertheless germane to the issue of mental health in students.

outcomes indicated that individuals working alone and in teams had specific stress indicators at different points throughout the problem-solving assignments. Additionally, the study showed the value of social connectivity and freedom to select team members” (Gomez-Lanier, 2018). Although focused on the stressors of team working, some of the findings are relevant for this study, namely that levels of stress fluctuate throughout the design process of the student participants, and presenting their work was perhaps the most stressful factor as “students [may see] their creative work as representations of themselves” (Gomez-Lanier, 2018). This perception has clear implications when we consider the learning environment of studio-based learning and the associated ‘crit’ or ‘jury’ exposure on stress levels for architecture students.

A comparable study concerning interior architecture students found that “the largest source of stress for students was academic factors, while the most prevalent stressor was academic overload. Other stressful academic factors included unclear evaluation criteria, assessment deadlines, faculty absence during office hours and shortage of course references. A major environmental factor causing stress was linked to finding a studio environment and also a place to store work and equipment. The principal stressors regarding personal factors were fear of failure and concern about their future career. Most notably, there is no significant differences between different year levels in respect to the stress.” (Alawad and Slamah, 2014). It is interesting to note here that their findings found the studio environment to be a stressor.

3.2.3 Medicine

The literature review also identified several studies that investigated issues of mental health problems in medical students. Amongst these, Bacchi and Licinio (2015) reviewed twelve studies published in English which investigated the prevalence of depression in medical students compared to students in non-medical degrees. They found that “one study found statistically significant results suggesting that medical students had a higher prevalence of depression than groups of non-medical students; five studies found statistically significant results indicating that the prevalence of depression in medical students was less than that in groups of non-medical students; four studies found no statistically significant difference, and two studies did not report on the statistical significance of their findings.” (Bacchi and Licinio, 2015). However, with respect to medical students and measurements of their psychological distress, other studies appear to correlate with Karklins and Mendoza’s aforementioned observations (see Section 3.2.1). For example, one study found that “psychological distress was significantly greater in our sample of Hungarian medical students than in the same age group of the general population.” (Biro et al, 2010)

Karklins and Mendoza sampled students of law and medical students for comparisons with architecture students, as these disciplinary groups are “well known for having higher levels of psychological distress” (Karklins and Mendoza, 2016), citing relevant inquiries; one claims to have found that prevalence of mental health disorders among medical students were higher than those reported in the general population (Wege, Muth, Li, & Angerer, 2016). Another inquiry determined that law students experience higher levels of stress, anxiety and depression than university students in other disciplines (Skead & Rogers, 2015).

Samaranayake and Fernando (2011) similarly included both medical students and architecture students in their study of student wellbeing and depression. A ‘satisfaction with life scale’ (SWLS) was used alongside a patient health questionnaire to assess depression and a generalised anxiety disorder questionnaire to assess anxiety levels. Regrettably, Samaranayake and Fernando only

present results for the medical students versus 'other students', and do not present the specific statistics for architecture students. The mean SWLS score for the group (which also included health science and nursing students) was 24.9, and for the total surveyed sample, rates of depression and anxiety were 20.7% and 20.0% respectively. The SWLS score for medical students was 26.4, with the rate of depression at 16.9%, and anxiety symptoms at 13.7%, suggesting that medical students had a higher satisfaction with life, lower rate of depression and lower anxiety than the 'other students'. The SWLS for 'other students' was 23.8; depression rates were 23.6% and the anxiety rate was recorded as 24.8% (Samaranayake and Fernando, 2011).

In a study based in Finland, Virtanen and Koivisto (2001) looked at the wellbeing of architecture and medical students at the point of their entry into the labour market. While the sample of architect students was relatively small, and research was conducted during 1994-1998 (which followed a severe economic recession in Finland), the researchers posited 'wellbeing' as the obverse of psychological stress; they promoted 'sense of coherence' (SOC) to be an apposite measure of wellbeing, where SOC is comprises senses of optimism and control over one's environment (Virtanen and Koivisto, 2001). In this study, the physicians of the group appeared to have slightly higher psychological distress in the first year of study (24.2) than the architects (23.1). However, the psychological distress figures for architects rose in the second year (24.1) and third year (23.8), while the medical students' ratings dropped and remained low (22.7 in second year; 22.9% in third year). The two groups ended the study with roughly similar scores, albeit, architecture students with a slightly higher figure (22.2 for medical students in year four; 22.6 for architecture students in year 4). The 'sense of coherence' was roughly similar for first year medical students (62.6) than for first year architecture students (62.5); but while medical students' sense of coherence climbed steadily (65.0 in second year; 65.3 in third year; 67.5 in fourth year), architecture students' sense of coherence scores dropped, in second year, and while they slowly climbed, they finished lower than they started (61.4 in second year; 61.6 in third year; 62.2 in fourth year). The authors suggested that good employment prospects are important to employee wellbeing and the turbulent employment situation for architects at the time contributed to a lower sense of wellbeing (Virtanen and Koivisto, 2001). However, the reported diminishing 'sense of coherence' for architecture students could perhaps also reflect dissonances within the curriculum, as well as between student and staff expectations.

3.2.4 Law

On the topic of law students' stress, mental health and wellbeing, a study by the Brain and Mind Institute found *"high levels of psychological distress and risk of depression in the law students and practicing lawyers who participated, when compared with Australian community norms and other tertiary student groups."* (Kelk et al, 2009)

Finally, Ison briefly compared suicide statistics using ONS data, which categorises architects in the group of 'business, media and public service professionals' and comments on figures for males who are low-skilled labourers and those working in skilled building finishing trades working in construction roles. She also cites figures for females working in 'elementary trades occupations' and under the 'culture, media and sport' category (Ison, 2017). However, this literature review considered the occupation groupings represented by these categories to be too broad, including several unrelated occupations, to provide accurate statistics on suicide rates of architects.

What is clear from the above studies is that while there may be similarities between architecture students (and professionals) and other professions, it is difficult to predict prevalence of mental health disorders, psychological distress, or poor wellbeing through inquiries into other occupations and courses of study. Useful data for specific student populations is thin, and similarly very sparse for architecture students. In order to reasonably assess the mental health and wellbeing of architecture students, effort is required to conduct more focussed, larger-scale studies. Both empirical data on rates of disclosure, and qualitative investigations into student perceptions would be of clear benefit in addressing the themes of this inquiry.

3.3 ARCHITECTURE EDUCATION: RISK FACTORS AND PEDAGOGIC CHALLENGES

From the perspective of mental health and well-being, this section discusses risk factors for students relating to 'signature' aspects of architecture education (Shulman, 2005) which have the potential to induce, develop or reinforce symptoms of stress, psychological distress, depression, anxiety or mental illness. This is not in itself unique to the pedagogy of architecture as any higher education curriculum holds the potential to induce stress and anxiety. However, key texts on architecture pedagogy, relating in particular to studio-based practices, directly and indirectly discuss matters of student well-being. This section seeks to examine this literature, and consider the learning process from the perspective of mental health issues that have been raised by students in recent surveys, studies, and media coverage on well-being.

3.3.1 Studio-based learning methods

As mentioned in the previous section, the studio-based learning methods that tend to prevail in architecture education differ somewhat from the learning experiences of many other university students. Importantly, however, the pedagogies adopted by some other academic areas (such as Art and Design) share commonalities with architecture, whilst other disciplines have distinctive methods with their own specific characteristics.

Formed from the teaching practices of the Ecole des Beaux Arts in the 17th century, design studio has an historic pedigree and has long been the universally adopted mode of architectural education:

"The design studio is the primary space where students explore their creative skills that are so prized by the profession; it is the kiln where future architects and designers are moulded. It has occupied a central position since architectural education was formalised three centuries ago in France and later in Germany and Russia, the rest of Europe, North America, and the rest of the world. It continues to occupy such a position in contemporary design pedagogy."

(Salama and Wilkinson, p4.)

Learning was, and frequently still is, structured around two 'experiences':

"(1) a small faculty of scholars delivering theoretical or technical information via lectures and (2) ateliers of approximately 20 students designing building proposals under the guidance of an acclaimed practitioner"

(Bachman and Bachman, 2006)

Despite its history and universality, design studio-based learning is a form of pedagogy that was relatively poorly interrogated, until it became a focus of research amongst a number of educators as

well as social scientists such as Schön (1983, 1985) and Gutman (1988). Due to the complex nature of its interactions, it remains a fertile area of study. Given the enduring format of studio-based teaching, it is implicit that it possesses specific strengths that continue to have application and relevance in contemporary education. It is at once the place that defines the acts of producing architectural proposals, of becoming and being an architect, and the forum which integrates otherwise disparate strands of learning through application to a series of complex and indeterminate problems. It is also the place that allows students to develop a social culture, and become progressively acculturated into professional beliefs and value systems; this is often referred to as the 'hidden curriculum' (Dutton, 1991). Thus, the studio is instrumental in the definition of the culture of a school, having been identified as being as important to student learning as the specific curriculum offered (Nicol and Pilling, 2000). Due to these strengths, the model has remained fundamentally unchanged and, until the last couple of decades, largely unchallenged. Certainly, it has rarely been viewed specifically through the lens of student well-being, although the issue has been implicit in some areas of study. For example, the extensive examination of key processes such as the review or 'crit', perhaps most notably by Kathryn Anthony in her work 'Design Juries on Trial' (1991), has called into question, and helped modify, some traditional practices that, in their worst guise, were destructive both at an educational and personal level (Parnell, Sara & Doidge, 2007).

3.3.2 The Social Value of Studio

It can be argued that the most significant attribute of design studio is the culture that it develops between students, as well as between staff and students. Both the social dimension of studio, and the opportunity for collaboration and sharing, act as stimulants to learning (Parnell, 2001). Indeed, many consider that studio culture, its behaviours, tacit values, and norms, represent one of the most enduring and memorable qualities of architecture education. Ultimately it is not so much the project work that acquires lasting significance, but the culture that the learning environment propagates (Koch et al, 2002). As a consequence, studio culture typically generates close bonds between individuals and a strong sense of community, this being advantageous to the learning experience as well as in future social and professional lives. These bonds can be very powerful and frequently endure over the course of a lifetime. Fisher (1999) describes this in terms of a 'fraternity' culture. Indeed, the process of learning through socialisation is a powerful component within the 'hothouse' environment of studio.

The 'hidden curriculum', a term coined in the 1970s for the contribution of studio culture to learning out-with the formal curriculum (Dutton, 1991, p.167; Giroux, 1981), appears to be as significant to student learning as the formal course itself. Relating to attributes that cannot be articulated or formally taught, the 'hidden curriculum' is central to defining the individual as a member of the professional group. Conceptually it concerns itself primarily with the ideology of knowledge, whereas the explicit curriculum focuses on the knowledge itself. The specific origins of the hidden curriculum may be traced back to the era of the master-mason with its innate culture of secrecy in which knowledge was rarely recorded in the ways in which we are now familiar. The way that such histories evolve tends to create ritualised practices, the reasons and justification for which are often unclear, particularly for those new to the field (Vowles, 2000). Schön and Argyris (1974) describe the evolution of a 'mastery / mystery game' where 'mystery began to be taken as a symptom of mastery', and it is argued that vestiges of this culture and practice remain in contemporary architectural education.

Whilst aspects of the formal learning process, such as the review process or 'crit', can be notoriously demanding on the student, and at times pedagogically questionable in terms of how they are enacted (inter alia Anthony, 1999), they too are cast in a positive light when considered with the benefit of hindsight, due largely to the spirit of camaraderie that is nurtured between peers over the period of a course. Indeed, it would appear that there exists something of a spirit of survival in the face of duress and adversity amongst many students, as documented by Koch et al (2002) in the AIAS Studio Culture Task Force report of 2002 entitled *'The Redesign of Studio Culture'*. This section explores the key issues relating to the phenomenon of studio, although it is important to acknowledge that while studio-based activity forms the mainstay of any course, there are normally other components of significance. Indeed, as shall be seen, the relationship between 'studio' and 'non-studio' activities can itself act as a stressor.

3.3.3 Community and Socialised Learning

The learning setting of design studio was founded on the principle of inhabitation and community, as one of the strongest mechanisms for supporting the diversity of learners within a cohort is the cultivation of a community that builds a strong inter-relationship between the learning process and social activity. The work of Tinto (1993) has highlighted the importance of the social and academic integration of students if they are to become and remain engaged in the education process. In the context of architecture education, the process of socialisation is relatively rapid for the majority of students, this being facilitated significantly by design studio, although experience shows that this socialisation process can become constrained by the adopted learning behaviours themselves in that the intensity of curriculum demands negate strong affiliations to be established outside the discipline (Koch et al, 2002). Equally, the same intensity can challenge those with other significant demands on their lives, and for whom the ability to immerse oneself in the studio community is limited.

Through consideration of the writings of socio-cultural theorists such as Vygotsky, Shaffer (2003) has observed how learning takes place through the internalisation of social processes of evaluation, and contends that therefore 'the norms of the community become a framework for individual thinking and individual identity' (p.5). The process by which the student participates in practices adopted by a community, was also identified by Wenger (1998) as being central to learning. Indeed, Wenger noted that communities of practice typically form in groups united by discipline interest as a means of disseminating and exchanging knowledge, and of sharing resources for learning. Hence the learning process involves both individual and social dimensions.

In their investigation into 'academic social climate' in architectural education, Davidovitch and Casakin (2015) found that "academic social climate was higher in the studio than in regular classes in social connections, students' involvement, teacher support, and order and organisation; while academic social climate measures were higher in the regular classes in teacher control and in the orientation of learning material." They describe academic social climate as the atmosphere created during studies "as a result of the interaction between the physical elements of the learning environment and the interpersonal interactions between students and teachers" (Davidovitch and Casakin, 2015) and go on to say that it has been shown to affect students' learning. This again

suggests that there are many positive aspects of the studio environment which can positively influence student learning and experience.

Notwithstanding the above, the construct of design studio was initiated at a time when students could generally apply the focus and commit the time required to occupy the design studio for long hours far beyond those required for formal tutorial purposes. However, the changing nature of the contemporary student cohort has been the subject of considerable commentary, this being commented on anecdotally in the telephone interviews carried out with current educators as part of this study (see Section 4.3). Many of today's students have multiple demands on their lives aside from their studies, this begging the question of the impact that competing pressures from beyond academia have on their ability to assimilate effectively into the studio-based community. If the perception endures that those committing the most extensive hours to studio are likely to be the highest performing students, then it can be easily seen how constraints on time and energy could manifest themselves as an additional burden on those with other responsibilities, promoting a sense of disadvantage or lack of belonging.

As a concept, professional assimilation extends far beyond the bounds of knowledge or skills acquisition, to aspects of personal behaviour, values, beliefs, and judgements. For instance, students typically vie with one another through the education process to demonstrate commitment to the task of assimilation through symbolic behaviours, such as working all night and sleeplessness. Adoption of such rituals is quickly regarded as a badge of honour, and an indication of one's commitment to the cause (Koch et al, 2002). The development of a sense of belonging forms a powerful component within the overall learning experience, and in the student's self-perception of progression and achievement. In a study conducted in Denmark, Thomsen (2006) observed that architecture students defined their subject as a way of life, as an all-embracing entity that contributes significantly to the definition of self, compared to many other disciplines where the boundary between professional activity and personal lifestyle was more clearly identifiable.

The tutor-student dynamic is also critical to the process by which the tastes, culture, and ethical and value systems adopted by a profession are imparted; this fundamentally determining the language and behaviour of studio, as well as the criteria for assessment of student work. Seen from this perspective, the power implicit in the tutor-student relationship becomes a tool for ratifying the students' acquisition of knowledge deemed 'acceptable' under the terms of the professional 'code' (Dutton, 1991; Cuff, 1992).

When considered in the context of widening participation and access, increased diversity in terms of ethnicity and cultures of prior learning, and other external pressures such as the need to work to support one's studies, such a complex, codified, and multi-faceted process of socialised learning can be seen to present increased challenges for many. For those whose commitments circumstantially place them on the periphery of the community, or whose lack of confidence causes them to position themselves there, such challenges have the potential to negatively impact on an individual's sense of belonging within the community.

3.3.4 Peer Pressure and the Culture of Competition

As discussed earlier, a survey conducted by the AIAS Studio Culture Task Force in 2002 determined that students use the studio as a vehicle for developing a sense of belonging to the architectural

community. However, such notions of community tend to be accompanied by other behavioural concepts, such as competition. This aspect also emerged in the survey, which found that students perceived that the greater time they spent in studio, the better they would perform, and that a macho culture of 'personal sacrifice' pervaded. This brief example demonstrates that studio embodies a range of complex, intertwined issues, many of which contain both positive and negative associations. There is a complex relationship between the sense of community and socialised learning setting that studio engenders, the constructive role that competition can play, and the negative connotations of competitiveness that arise when individuals feel excluded through their perceived inability to compete. Importantly, however, negative perceptions of self may not relate only to those who are disadvantaged, but by the change in circumstances that transition to higher education introduces. For example, for courses accepting those with the strongest academic attainment at secondary school, the realisation in some individuals that they can no longer represent high achievement in this new academic paradigm can similarly prove challenging.

3.3.5 The Role of Tutor Behaviours

Developed from constructivist principles, the commonly adopted processes of studio-based learning are long established, are recognised as having high educational value. However, a number of studies have alluded to the fact that the efficacy of theoretical definition of studio-based pedagogies can be undermined by the enactment of these, specifically through the considerable potential for tutor behaviours to (often inadvertently) compromise the processes of learning (inter alia Till, 2005; Webster, 2007; McClean, 2009). For example, in relation the 'crit', Ochsner (2000, p.196) notes the tendency for some tutors to replicate their personal, negative experiences through their own behaviours, a process described as 'counter-transference'.

The nature of design tuition as an extended dialogue over time, in which the tutor arguably becomes more invested in the student's work than in many other forms of learning, perhaps challenges the objectivity of the tutor at times, and has the potential to encourage judgement of the individual as well as of the individual's work. The need for tutors to exercise objectivity in their criticism has been noted by Altas, who maintains that it is incumbent on the tutor to identify a variety of approaches in terms of their own language and philosophy (Ciravoglu, 2004).

Due to the centrality of studio-based learning, the literature is dominated by studies relating to aspects of studio pedagogy. However, in the great majority of schools, the course structure includes other important curricular components (often taught by more traditional approaches) which, whether consciously or otherwise, are often portrayed as being subservient to the integrative vehicle that is the studio-based project. The messages conveyed by staff in this respect, whether explicitly or by implication through attitudes and behaviours, can themselves be the cause of stress or anxiety amongst students. Issues of time management, prioritisation, and understanding of staff expectations can be negatively influenced in this way. Arguably the area of greatest notoriety with respect to tutor behaviours is the studio review or 'crit', this being an event where the detrimental impact on the student of an ill-conceived or poorly enacted or managed event, is well documented.

3.3.6 The 'Crit' or Review

As part of the studio-based learning approach, a major facet of architectural education is 'the crit' or 'review'. The crit typically requires the student to publicly present their work, and plays an important role in equipping students to defend their work. The system is a 'traditional architectural learning

assessment tool' (Salama and El-Attar, 2010) which allows students to be part of the evaluation process when their projects are assessed. The studio crit is:

"within design education, the main formal point for formative assessment. At the studio crit, students are asked to present their ideas and/or 'product' to the group, explain their thinking process and receive formative feedback, most commonly in a verbal form, from their tutors and sometimes also their student peers... The crit allows the student an opportunity to practise and develop presentation skills and a verbal articulation of their thoughts to an audience" (Blair, 2007)

At best the 'crit' is at once a social event, albeit one that is emotionally charged (Austerlitz and Aravot, 2007), a formative assessment, and a vehicle for communicating and imbuing the attitudes and behaviours of the profession. Yet, whilst having the capability of being a powerful learning medium, it has also attracted a degree of notoriety because of the negativity and insensitivity that can result, with potentially detrimental consequences to learning (inter alia Anthony, 1991; Willenbrock, 1991, Wilkin, 2000). Traditionally, criticism has often tended to be harsh, at times even personal, and the crit has become feared by many students, especially those less confident or able. With hindsight it has come to be regarded by many as a rite of passage for students, in which there is an individual and collective pride in having survived its rigours.

Numerous questions have been raised about the efficacy of normative practices such as the 'crit', in particular relating to the nature of dialogue given the obvious 'power asymmetries' that exist amongst participants (e.g. Dutton, 1991). Although understood as flawed in certain respects, the review continues as a mainstay of the learning process, one of its over-riding strengths being seen in the opportunity it presents to provide a link between the endeavours of design studio with the world of professional practice in which one requires a degree of resilience, as well as important verbal and visual communications skills. Paradoxically, this dimension of 'reality' forms the mainstay of the common defence of its negativity, even brutality, and perhaps says more about the machismo characteristic of the profession than of sound pedagogic practice (Henderson and Till, 2007). Alternatively, it can be seen as a means of judging the academic quality of a school, thus inviting a more adversarial and critical approach as a measure of rigour. However, it is more in judging the educational effectiveness in the development of design skills that the concerns are often raised. For example, Argyris (1981) has noted conflicting agendas between students and tutors that can become manifest in review events. Other commentators consider reviews to encourage an adversarial approach to clients in the realm of practice (Boyer and Mitgang, 1996), presenting a platform for the ego of panel members, or at worst, a process of ritualistic humiliation. It is also important to present the corollary, which is that a well managed, academically focused, and controlled review can be an enormously rich, celebratory, and empowering learning experience.

Sara and Parnell (2014) examined the relationship between fear and learning during the crit process. They assert that fear which has become a chronic condition is also likely to affect students' mental and physical health and that where the conditions are stressful, *"many students learn less, are less creative and are building the potential for related mental and physical health problems"* (Sara and Parnell, 2014). Observations such as these have, in turn, led to a number of studies examining the causes of stress as well as solutions for mitigation. The majority of participants of their study, when asked to describe their experiences of the crit, described *"a tense, nerve-wracking or awkward atmosphere. In some cases this was seen as positive, but for the most part there was a preference for*

a more laid-back supportive atmosphere". Additionally, they also found that there were differences in response from female students, versus male students, where "57% of the female students (23 of the 40 female students) recorded a negative response, whereas 47% of the male students (18 of the 38 male students) recorded a negative response" (ibid).

The gender aspect was also mentioned in Blair's (2007) paper, with reference made to Till (2004) who stated that "*The [architecture] crit places into a pressure cooker a combination of potentially explosive ingredients; students catatonic with tiredness and fear, tutors [mainly male] charged on power, and an adversarial arena in which actions are as much about showing off as they are about education.*" (Till, 2004)

From the student perspective the review remains one of the most controversial aspects of the learning process. Reasons for this include the fact that reviews can cause anxiety and negativity that compromises the existence of open dialogue, and which counters their fundamental pedagogical intent (Nicol and Pilling, 2000). Furthermore, some studies have presented evidence of gender or racial bias within the review setting (Frederickson, 1992). Alternatively, with respect to educational transition, Jackson observes that, based on a culture of encouragement and success, contemporary secondary school education tends to be reward oriented, with the result that the abrupt exposure to a culture of criticism demands a degree of cultural and psychological modification (Jackson, 1999). As Anthony observes, the value that students derive from studio appears to increase as they progress through their studies (Anthony, 1991).

3.3.7 Feedback and Power

Feedback constitutes a complex and often subtle area whose efficacy is contingent on personality and ability as well as carefully defined procedures (Hourigan & McClean, 2013). Despite studio-based learning being founded on notions of discourse and effective dialogue, its true efficacy has been called into question with respect to the tutor-student relationship (Dutton 1991). Power asymmetries and hierarchies can create dependencies that influence the openness of dialogue, potentially eroding the student role and subordinating their 'apprentice' views to the dogma of the tutor or 'master'. Within this context the effects of power are central to the student's understanding and acceptance of critique as a pedagogy, and a tool of learning rather than judgment. Hence power has a profound relationship to feedback, whether formative or summative, not least as it is typically the tutor who defines the agenda for feedback (Askew 2000). However, peer groups can have a function in mitigating any associated negative consequences. For example, just as peer interaction occurs where student progress generates dialogue and criticism (Nicol & Macfarlane-Dick 2006), peer conversation is essential to reflecting on and rationalising tutor positions and behaviours. However, despite the potential to reduce any negative consequences of tutor power, the capability to do so effectively was found to be compromised when students appropriate power through their behaviours, whether intentionally or sub-consciously (Hourigan & McClean, 2013).

Power cannot be removed from the tutor-student relationship, indeed there are instances where students actively seek the authority of the tutor, and points where power can be constructively channelled to challenge and stretch students through shifting their frames of reference (Mezirow 1997) in ways that peer dialogue is unlikely to achieve. Hence the management of power through the pedagogic process is essential to optimising the efficacy of critical discourse.

3.3.8 Workload and Work-Life balance

The demands of studio are extremely time consuming, especially when compared to study patterns in many other subject areas. Expectations are heaped on students to fill their time with analysis, discussion, evaluation, synthesis, modelling, drawing, etc, all essential components of learning in architecture, yet ones that can become all consuming. In a very short time span, the student adopts, or is pressured to adopt, the behaviours that have become the norm both within education and the practice setting. As a consequence of the culturally determined expectations placed on students regarding their commitment and application, design studio typically adopts learning processes that consume large amounts of student time. Commonly, time management is slack, with working hours and often staff involvement extending well beyond that which is formally timetabled. Indeed, for many the clock is the only thing which determines when work ceases.

The issues within this extend beyond the realm of achieving a balanced life, to an inevitable dislocation from other activities, events, and phenomena in the wider world. Given the role that architecture plays in society and communities, this could be viewed as somewhat ironic. Indeed, as Cuff suggests, *'certain actions and attitudes are tacitly justified by a system of professional beliefs – an ethos – that is rarely challenged'* (Cuff, 1991, p.21). (See also comments by Samra in Section 3.3.9). Consequently, the second report of the AIAS Task Force on Studio Culture announced the development of school policies, effectively 'studio charters' in many US schools, with the aspiration of creating 'a seamless, quality-driven, healthy experience from enrolment into practice' (Anon, 2008, p.28). The impact that these have had, or the degree to which they have been adhered to, remains unknown.

The nature of design is that it evolves over time, and hence patterns of studio occupation provide an indication to the student of the required / desired level of engagement. In this regard, design studio represents a comparatively informal environment that is conducive to creativity, experimentation, exploration, and expression. This constitutes a major attraction to students, as well as satisfying expectations of the conditions required when studying a creative subject (Kellogg, 2004). There is much evidence to demonstrate the generic importance of alignment between student expectations and the experience delivered (Miller, Bender, Schuh et al, 2005), and in this respect architecture fares well. Contrastingly, however, the casualness of studio²⁵ also appears to generate difficulties for students who increasingly require to work to fund their passage through higher education, or have equivalent external commitments that need to be accommodated and balanced.

A study conducted in 2006 researched student perceptions of academic workload in architectural education (Bachman and Bachman, 2006), found that: *"(1) excessive stress due to workload (study time and job hours) decreased performance and increased anxiety and depression and (2) self-efficacy and social support mediated the effects of stress"* amongst architecture students. Unfortunately, the study did not reveal percentages for the depression and anxiety prevalence amongst the participants, instead only discussing the correlation of these with other factors of university life. It is presumed that the study was limited and that participants were architectural students at the author's institution, University of Houston College of Architecture.

²⁵ Relative to many other learning settings, in particular those found in the UK secondary education system

Within the profession itself, there is a widespread culture of long hours of working, this being well documented. However, some practitioners are seeking to challenge these traditional patterns of practice, such as members of the London Practice Forum, who are challenging such orthodoxies in order *'to make the profession fairer and to tackle wider social issues'* (AJ, 03 January 2020). Conversely, however, others regard architecture's long working hours culture as playing a vital role in maintaining the international competitiveness of practice, as exemplified by Patrick Schumacher's contribution to a debate held at the Pratt Institute in New York towards the end of 2019²⁶. Whilst of some relevance to this study, the issue of working patterns in the profession is itself complex, and the relationship between education and practice more complex still, with both lying beyond the scope of this study.

3.3.9 A Culture of Long Hours

A small-scale study of first year students at Northumbria University collected data on how students spent their time (study, work, sleep, eat, personal, household, commute), and their personal experiences with respect to the pressures on their time (Holgate and Jones, 2011). Gathering data for two separate weeks during the second semester (the first being a relatively 'normal week' the second being the week preceding a major assignment submission), they found that on average, the students needed 13 hours more study time than a notional workload figure of 40 hours in the first week to complete their studies, rising substantially in the second, deadline-focussed week. The personal lives of participants suffered as a result of perceived time-pressures (Holgate and Jones, 2011). Moreover, it was found from qualitative responses that the workload for architecture students was higher than for students of other courses, with suggested solutions including:

- Teachers carefully defining the boundaries of project submissions to "establish attainable outputs within defined time limits";
- Better management of expectations on the part of both staff members and students; and
- Learning the valuable skill of self-regulation (Holgate and Jones, 2011).

In a similar survey conducted by the University of Toronto it similarly emerged that workload pressures constituted the greatest cause of stress amongst students (Leon et al, 2014). Results echoed those from the Architects' Journal Student Surveys of 2017, discussed earlier.

In 2017, a Cambridge professor sparked a backlash among his first-year physics cohort when he sent an email to warn them "of the perils of having too much of a 'good time' at university" (Turner, 2017b), arguing that students can only do well if they are completely focused on their course. Student mental health charity Student Minds and Cambridge University Student Union's Welfare and Rights Officer criticised the email, adding that it was possible to succeed at university while having a social life and that the approach suggested by the professor was ill-informed, potentially leading to students placing too much pressure on themselves at the expense of their mental health (Turner, 2017b). The professor's sentiment is echoed in responses to the AJ student surveys, in which one respondent noted *"I once had a studio tutor tell me to manage my workload by 'sleeping less' "* (Jessel, 2018). Another respondent in 2016 noted that a *"culture of suffering for your art is promoted within education"* and the report talks about the *"stereotype that architecture has to be a life with no balance"* (Waite and Braidwood, 2016). Former RIBA president Jane Duncan's response to the 2016 figures identified that *"Long hours, a heavy workload ... and intense design scrutiny" are*

²⁶ See: <https://www.youtube.com/watch?v=WPby-itr7Y&t=24s>

'embedded' in "the culture of architecture education" (ibid). However, there is a growing move amongst UK schools to end the culture of 24/7 access by restricting access hours, a call for which has been championed by a number of academics including Satwinder Samra of the Sheffield School of Architecture, who lamented the fact that all-nighters form 'the bed-rock of architecture education' (Waite and Braidwood, 2016. Braidwood and Waite, 2017). In a similar vein, Ben Channon, Senior Architect at Assael Architecture, who writes a mental wellbeing bulletin for his practice, described the statistics as *'worrying, given the huge importance of sleep for our mental and physical health.'* (Braidwood and Waite, 2017).

A director of an architecture firm said in response: *"My experience is that all-nighters and the pressure of the course for many people can be incredibly rewarding, often a lot of fun and usually self-imposed. Students should work hard and be challenged as it prepares them for the real world."* (ibid). Contrastingly, Rowan Parnell of Architecture Initiative places the blame on architecture schools, which he says influences the graduate to perpetuate this mode of working: *"courses are putting the wrong emphasis on students in terms of time management (i.e. students being pushed to work all hours), which leads to a perpetuation of this practice once they leave uni(versity) and come into practice, either pushed by the studio as a culture or by the employee as this has been normalised for them"* (ibid).

It seems that staff expectations of students (and indeed some students of themselves) studying architecture are often high, these eliciting a variety of responses from students. Many seem to accept the heavy workload as 'just the way things are' although some question issues of workload, with one student from Sheffield University saying that *"architectural education was out of touch with what is happening to the profession"* and that *"we need to reconsider the priorities that are in place within [schools] and appreciate that a culture of "more work wins" is incredibly unhealthy."* (Braidwood and Waite, 2017)

The long hours that architecture students are expected to work during their studies also appear to conflict with the rising trend of students working part-time in order to support their studies, especially in the UK nations where student fees have been introduced. In response to the 2017 AJ student survey, Harriet Harriss, now Dean of Architecture at the Pratt Institute, New York, attributed blame for the student "mental health crisis" on the "debilitating debt" that necessitates many students having to work part-time (ibid). In 2016, Gem Barton, course leader for the BA (Hons) Interior Architecture at the University of Brighton commented that:

"The stresses students face outside of their intensive academic workload are of great concern for staff, students and their families alike. We are finding that many more students are taking on part-time work in an attempt to combat mounting debt. While there are guidelines about the maximum hours a student should work, adhering to this is not always possible. In some of these cases, attempting to balance paid work and academic work has a detrimental effect on the students' wellbeing as well as their ability to engage sufficiently with the high demands of an architecture course"

(Waite and Braidwood, 2016)

Similarly, a stark comment from the 2017 AJ Survey illustrates the worrying strain on some architecture students due to workload, and additionally the length of the course:

"I can't bear another four years studying as it has nearly killed me doing these three already."
(Braidwood and Waite, 2017).

The overall consensus, from the AJ Student Surveys at least, appears to be that workload is unmanageable in the long-term for architecture students. This is a complex topic, with many interrelated factors. As one architecture practitioner, Manisha Patel, partner at PRP, commented in response to the 2017 survey:

"Few courses match the substantial investment of time and money required to simply reach the bottom rung of career progression, and many lose heart in what they are working to achieve. Couple this with crippling student debt and subsequent stiff competition for jobs, it becomes evident that students are having to contend with a complex cocktail of burdens, with very little to equip them for it." (ibid).

A 'sleep survey' conducted by The Tab in 2018, found from its 6000 respondents that architecture students are more likely to 'pull all-nighters' than any other student group (Jenkin, 2017). Indeed, a remarkable 88% of architecture students reported that they had worked all night, this figure being the highest of the 25 subjects surveyed (results ranged from 25% to 88%). Whereas the prevailing culture of long working hours has its roots in practices of old and has become habituated, the interim period has seen develop a greater understanding of the impact of such practices both socially and in terms of personal wellbeing. The relationship between effort hours and productivity has been the subject of studies across many spheres of endeavour, with many demonstrating a lack of correlation between the two. Indeed, it has frequently been found that the progressive extension of working hours tends to result in diminishing returns for the employer (inter alia Collewet & Sauermann, 2017; Carmichael, 2015), and often at increasing cost to the individual (Kodz et al, 2003). There is no evidential reason to suggest that this should be any different amongst architecture students, or those from any other discipline.

It is acknowledged that the issue of the working culture within the profession is complex, encompassing the economics of architectural practice, and the value that architectural services are perceived as having within the commercial environment. Such structural issues lie well beyond the scope of this study. Nevertheless, although the magnitude of challenge involved in transforming such deeply entrenched cultural practices is not to be under-estimated, there is a powerful argument that education has a significant role to play.

However, in the interests of balance and objectivity, it is important to reference to some work which suggests that staying up late to work on creative projects can have positive consequences. Wang and Chern (2008), for example, found that art students have a '*night owl learning style*' and that 57.7% of art students feel 'more creative' after midnight. Other research suggests that there is a 'just right' amount of work for students and that too little can also cause issues. For example, "*A survey of more than 14,000 English, Scottish, Welsh and Northern Irish undergraduates showed that students with a heavier workload of around 30 to 39 hours spent in the lecture hall, library or logged into their laptop are more content with their choice of course and suffer less from mental-health problems...students want more work. It is making them happier, provided they're not doing more than 40 hours a week, because they don't like that much either, according to the 2018 student academic experience survey co-published by the Higher Education Policy Institute (HEPI).*" (Mesure, 2018).

3.3.10 Course Length

Finally, a risk factor that is perhaps more applicable to architecture students than most other university students, is the particularly long course length the impact this has on personal finance (with respect to the financial pressures noted in Sections 3.3.11 and 4.3.1.3).

The AJ Student Survey results from 2017 and 2018 in particular document this challenge, claiming the cost of studying architecture was now out of reach for many and that *“only the rich need apply to study architecture”* (Jessel, 2018). When asked in 2015 and 2016 about the length of architecture education, 65% of respondents of the 2015 AJ survey and 60% from the 2016 survey felt that the course of study was too long (Waite and Braidwood, 2016). Commenting on these results, Anthony Seldon, Vice-Chancellor at the University of Buckingham, and a mental-health campaigner, commented that *“Those studying architecture appear to be under added burdens emanating perhaps from the very length of the course and time taken before earning a proper income”* (Jessel, 2016). Also responding to the 2016 survey, Stephen Buckley, Head of Information at mental health charity Mind, reported a surge in calls to the charity’s helpline from students struggling due to financial issues over the last few years. (Jessel, 2016), while Jane Duncan, RIBA president at the time of the 2016 survey said she was *“concerned that the combination of tuition fees, rising student debt and the necessity to take on paid work can trigger or exacerbate mental health problems”* (Jessel, 2016) For John Assael of Assael Architecture, architecture education is (again) becoming *“a profession for middle-class kids with wealthy parents”*. He says that, with high fees coupled with some inappropriate salary practices for students excludes and ‘discriminates against very talented kids’ (Jessel, 2016). This was in response to the AJ survey findings, which indicated that 35% of respondents felt their course was either ‘poor’ or ‘very poor’ value for money and that around 31% of the student sample had been asked to work for free (Jessel, 2016) despite this being contrary to the expectations of the professional body. Even more importantly, such unethical salary practices directly undermine architecture education as, under current legislation, responsibility for 2/7 of the minimum time period to registration (i.e. 28.6% of the education process), lies with practices.

The introduction of student fees in England and Wales in 2012, has significantly exacerbated an already financially challenging course of study. The survey indicated that 68% of full-time Part 1 English and Welsh students said they would owe at least £40,000 by graduation, compared with only 15% in Scotland, where tuition is free (Braidwood and Waite, 2017). Former RIBA president Jane Duncan is quoted as saying: *“The intensity of a demanding and long course, along with other challenging factors including rising student debt, puts architecture students under particular pressure”* in response to the 2017 survey (Braidwood and Waite, 2017).

The 2018 AJ student survey described these finance pressures as being of even greater concern. However, partly in response to these financial pressures, the profession introduced a new educational model for the first time in decades. An apprenticeship scheme, providing an opportunity to simultaneously earn and learn, was rolled-out in England in July 2018, with the Institute for Apprenticeships offering two standards: “Architectural Assistant, including Part 1 qualification: 4 years’ duration” and “Architect, which includes Part 2 and Part 3 qualifications: 4 years’ duration” (RIBA, 2018b). However, in a cautionary remark made in 2016, Robert Mull, Professor of Architecture and design at the University of Brighton noted *“none of this really changes things unless it comes with a change in values. Changes in structure alone will simply allow the underlying*

inequalities, exploitation and pressures to continue for longer and more students will suffer.” (Mull, 2016)

3.3.11 Financial Pressures

The financial pressures arising from studying architecture was a major focus of the 2018 AJ Student Survey, the report of which was titled: ‘Only the rich need apply’ (Jessel, 2018). It details the issues architecture students experience in trying to support themselves financially through a relatively long and expensive course of study. The survey data shows that 33% of full-time students in England and Wales predict they will owe between £50,000 and £70,000 after graduating, and 45% of respondents believe they will never be in a position to pay back what they owe. The survey also highlighted that architecture students must also content with hidden costs for educational necessities such as model-making, printing, and study trips, as well as computers and books. (Jessel, 2018).

The cost of the course was by far the biggest worry for architecture students in the 2018 survey, on which Harriet Harriss noted that mental health issues are exacerbated by financial concerns amongst students from financially disadvantaged backgrounds, and that *“juggling jobs and a demanding package of study along with anxiety over debt, is creating a mental health time-bomb and increases the likelihood of them graduating with an average degree.”* (Harriss in Jessel, 2018). This perspective is supported by the survey which revealed that 81% of full-time Part 1 students said their family had contributed financially to their education, with 45% in England and Wales saying their family had supported them financially by a ‘significant amount’ (Jessel, 2018). Only 19% of respondents from England and Wales had no financial support from their family.

To summarise the above, a significant percentage of students are concerned about the poor mental health of architecture students, and cite long hours and financial concerns as major sources of stress. Such concerns are endorsed by many academics. When considered in the context of widening access and diversity of intake, these results also reveal the heightened magnitude of challenge for those students required to work to support their studies, from poorer socio-economic backgrounds, or who have other significant commitments such as parenting or acting as a carer.

3.3.12 Profile of Student Body

Generic reference to the student body as if it were a homogenous group can tend to conceal the fact that different life experiences, cultural perspectives, preconceptions, expectations, and aspirations (of self, of profession, as well as of institution), impact significantly on the educational experience, as well as the individual’s ability to acculturate to, and engages with disciplinary norms. Such differences emanate from social, cultural, and ethnic groupings and, as UK society becomes ever more multi-cultural, and while the country remains an attractive destination for international students, there is increasing demand for the different perspectives embodied in society at large to be represented and embraced by education processes.

Stevens (1998) argues that architecture education has to date systematically operated in a way that ensures the replication and preservation of professional models. This, he contends, includes a predisposition that disadvantages those from the *‘lower strata of society’* (Stevens, 1998, p.189). The profession’s *‘habitus’* is cultivated through exposure, attitude, imbued aspiration and confidence, and perhaps lineage, and acts as a tool through which the student understands the educational process, its underlying value system, and the rules of engagement with the course of study. Thus, it

is argued that students from backgrounds in which cultural or artistic interest has been high, are already predisposed to the primary concerns of an architecture course.

3.3.13 Inclusivity and Equity

The topic of discrimination, both in the architecture profession and in architecture education warrants its own study, particularly as available data is currently scant, especially with respect to education. With respect to architecture education, the AJ Student Survey in 2016 (notably, the questions in this year appear to have been removed from the subsequent annual surveys) revealed figures for discrimination against gender, sexuality, race, age, religion of beliefs, and disability. While sexual orientation, age, and religious belief were found to be areas free from discrimination, 50% of female and 10% of male respondents reported that they had experienced some form of gender-based discrimination. Similarly, 17% of female, and 10% of male respondents claimed that they had experienced discrimination that was racially based or motivated (AJ Student Survey 2016). Qualitative comments from the survey recorded female perceptions that tutors at time regarded them as being 'less capable' or 'more sensitive' than their male counterparts. Equally, some female respondents also claimed that male students tended to dominate discussions. (Waite and Braidwood, 2016). Murray (2017) referred to architecture as a '*diseased profession*', stating that "*it's no longer a secret why women leave architecture*". This echoed the RIBA Technical Report authored by Manley et. al. (2003) which highlighted the wider context of women's experience in architectural education and the profession, and which continues to bear relevance to the present day; an example being an article in the Architects' Journal (AJ) highlighting the '*widening gender pay gap*' between men and women in architecture (Mark, 2017).

With regards to racial discrimination, one respondent wrote: "*There is an obvious division between the indigenous 'British' students and the international students, especially when it comes to group work.*" (Waite and Braidwood, 2016). The AJ 2017 survey report does not provide figures for discrimination, but does state that the data indicates that women are more likely to give up on a career in the profession than men, citing the desire to have a family in future as being a disincentive to continuing (ibid). Unfortunately, figures relating to those leaving education and the profession, and the often complicated mix of motives for doing so, have been unevenly reported in recent years, and the comparability of data from year to year is unreliable.

3.3.14 From academia to the profession

There remains a perennial debate regarding the purpose of architecture education with respect to the profession of architecture, that is whether the curricular aims are to explicitly prepare graduates for practice, or otherwise to provide a rounded, generalist education in architecture as an intellectual discipline in its own right, from which only one outcome is to progress to the world of practice. Brown and Moreau (2002) concisely sum-up the debate as follows:

"On one side are those who would argue for a vocational-based education that prepares students for the specific demands of practice; on the other side are those who counter that the focus should be to stimulate and develop student's creative abilities and that academia should be provided the autonomy to deliver on this aim". (Brown and Moreau, 2002).

The 2018 AJ Student Survey revealed that for some 14% of students, their greatest concern is that they are not sufficiently prepared for practice. In 2016, 35% of students felt that architecture education did not equip them for practice (Waite and Braidwood, 2016). A memorable quote from

the 2016 report by John Assael of Assael Architecture, summed up this issue: *“students from great schools of architecture can design a city on the moon but they can’t make a conservatory application for their mum”* (Waite and Braidwood, 2016).

But, is it the role of universities to provide this type of education for architects? Some worry that there is not room in the curriculum for ‘anything else’ as the RIBA criteria requires at least 50 % of the course is focused on design (Waite and Braidwood, 2016). Kevin Singh, head of Birmingham School of Architecture uses the example of the driving test: *“it’s not about getting a piece of paper. It’s about making sure you’re a safe driver for the rest of your life... architecture education is quite similar to that. Actually this is about people for another 40-50 years of their career. How much can you recreate in a university?”* In the same report, Alan Dunlop, honorary chair in contemporary architectural practice at Liverpool School of Architecture, asserted with respect to the 2016 AJ student survey that *“administration and project processes [as] the responsibility of the profession, and making students fit for practice is not the primary role of schools of architecture.”* (ibid)

3.4 ARCHITECTURE STUDENT SUPPORT

This section seeks to provide an overview of the support, guidance and services currently available specifically for UK architecture students. By focusing on pastoral initiatives tailored to architecture students, it complements Section 2.4, which looked at university-wide support services more generally. This review incorporated a search of the websites of UK architecture schools, however, it is acknowledged that this approach is limited in its scope as much of the relevant information on student support and welfare is contained in student-led or society blogs, school blogs, and/or is discussed in online journals and magazines. Consequently, the Schools survey and subsequent telephone interviews discussed in Section 4.3 attempt to illuminate this area.

As can be seen in Appendix One, much of the university support provision centres around wellbeing support, mental health support and disability support. There are a range of services provided, but only a few of the 51 institutions identified evidenced the provision of specific support for architecture students, or displayed this prominently on their webpages. The few universities that did appear to have tailored support included the following initiatives:

- Birmingham City University – ‘Level up team’ for pre-induction with ‘Student Success Adviser’ and several ‘Level up mentors’ and ‘personal tutors’, all with experience in the field of architecture education. (Birmingham City University, 2019; Farrow, 2019)
- University of Brighton - Blog posts about mental health; hosted Architecture Student Network Conference in 2015 with mental health as the main theme; provides dedicated Student Support and Guidance Tutor (SSGT) for Architecture and Design. (AIA Editor, 2016a; AIA Editor, 2016b; AIA Editor, 2017; AIA Editor, 2018)
- Loughborough University - each Academic School has dedicated Wellbeing Adviser (Loughborough University, 2019)
- University of Newcastle – provides a ‘parenting scheme’ peer support for new students joining the School (University of Newcastle, 2019)
- Glasgow School of Art – reflective assignments regarding balance of professional career path and personal health and wellbeing (Marshall, 2019)

- The University of Sheffield has a dedicated mental health hotline set up for one week after staff occupied arts tower in dispute over pensions barring access to architecture students (Pitcher, 2018).

3.4.1 Support Services

A2013/2014 University of Toronto study found that 17% of their architecture students reported using counselling and psychological services (Leon et al 2014) and that *“only 3% felt as though faculty was doing enough to address mental health issues amongst students”* at the University’s John H. Daniels Faculty of Architecture, Landscape, and Design (Whelan, 2014). The results of this study inspired the University of Brighton and the Architecture Students Network to host a conference, where *“together they have drawn up a list of recommendations in a manifesto aimed at tackling the problem - including discouraging a 'culture of all-nighters' to challenge the stereotype that 'architecture has to be a life with no balance”* (Waite and Braidwood, 2016).

The full manifesto from the University of Brighton and the Architecture Students Network appears to be no longer available, however the work on mental health and promotion of wellbeing within the university has continued. Support ranges from yoga sessions, to professional voice coaches to build student confidence in preparation for crits. (AIA Editor, 2017).

Brighton also ran a mental health poster campaign which picked up on the earlier work started when the School hosted the 2015 annual Architecture Student Network Conference (AIA Editor, 2017), and in 2018 Brighton held a whole school event to discuss and debate how to promote better mental health in the study of architecture and interior architecture (AIA Editor, 2018). Brighton has pioneered the provision of a dedicated Student Support and Guidance Tutor (SSGT) for Architecture and Design who works closely with teaching staff (AIA Editor, 2016b). 285 individuals out of a total cohort of 565 students used the service in 2015-2016, with the post-holder commenting that *“they (the students) find having a member of staff who understands the subject but is not their academic tutor can really help them to overcome some of the difficulties these assessment methods trigger (crits, etc).”* (AIA Editor, 2016b).

3.4.2 Support and guidance from professional bodies, regulators, and others

This section seeks to outline available guidance and responses to the mental health challenge by architectural bodies in the UK.

The Royal Incorporation of Architects in Scotland (RIAS) does not appear to explicitly address mental health on either its new or old websites, for neither working architects nor students. However, the Royal Institute of British Architects (RIBA) have commissioned a number of studies into student mental health (due to its funding, this study effectively forms one such study), and the Institute also supported the aforementioned survey and Masters project in conjunction with the Architects Benevolent Society (Kirkpatrick, 2018; RIBA, 2018)). Specific advice on their website is aimed at working architects rather than students (Newman, 2019).

The ARB (Architect’s Registration Board, the UK’s statutory body, produced a committee paper on the topic of mental health and wellbeing of architecture students, discussed in previous sections (Ison, 2017) It made several recommendations, a summary of which is outlined below:

- “1. To consider undertaking further research into the issue of ill health amongst students on prescribed architecture qualifications to gain a full understanding of the key stressors with a view to tailoring guidance to address these;*
- 2. To consider signposting universities and students to the 2015 best practice guidance published by Universities UK. To consider issuing other guidance to universities providing prescribed qualifications on how to support students appropriately;*
- 3. To consider asking universities to explain their approach to combatting the stigma associated with mental health problems. This could also include asking universities to provide students with information regarding who to approach for assistance;*
- 4. To consider whether universities should be asked to document a commitment to providing reasonable adjustments where appropriate.;*
- 5. To consider updating the ARB student handbook to include signposting information regarding a range of support services including, but not limited to, those covering mental health problems;*
- 6. To consider undertaking a myth-busting exercise, aimed at informing students how other students and practicing architects have identified successful strategies to tackle mental ill health. This could take the form of anonymous case studies demonstrating how students and architects experiencing mental health difficulties have made reasonable adjustments to their working arrangements including agreements about roles; projects; working hours and lines of reporting. Such an approach would go some way to addressing accepted narratives within the sector.*
- 7. The Prescription Committee queried to what extent the number of Criteria which students are required to meet, linked to the financial penalties for failure, could impact on the mental health of architecture students. Whilst the point was noted, it was also highlighted that as a regulator ARB has a statutory responsibility to ensure that individuals wishing to join the Register were competent to practice as architects. Consequently, the Committee added a final recommendation that this issue should be considered as part of any future Criteria/Procedures review.” (Ison, 2017)*

The ARB now provides a couple of support students links on their ‘student handbook microsite’ (ARB, 2019), however, it is unclear how many of the paper’s recommendations are being taken forward.

Finally, the Architects Benevolent Society (ABS) provides a wealth of support and information for students worried about their mental health (alongside separate advice for those already in practice). The ABS have established ‘Anxiety arch’, a “visual tool for raising awareness about common mental health conditions such as anxiety, stress and anxiety-based depression” (ABS 2019a). Additional support is provided through the Architects’ Mental Wellbeing Forum (AMWF) set up by ABS ambassador, Ben Channon of Assael Architecture (ABS, 2019c). The ABS have launched support for students in the form of a student membership to Anxiety UK which may be available free of charge to those studying architecture, architectural technology or landscape architecture within the UK (ABS, 2019b). The ABS cover student membership of Anxiety UK which includes a dedicated helpline, access to therapies at reduced cost, free subscription to the ‘Headspace’ meditation and sleep app

for one year (worth approximately £72), access to specialist online support, subscription to *Anxious Times* magazine, access to Anxiety UK's Member's area and member's only online message boards, as well as a number of other services and discounts (ABS, 2019b).

3.5 SUMMARY

Although there is a growing body of literature relating to the generic prevalence of student mental health problems in UK higher education, the literature specifically pertaining to the study of architecture in the UK is very limited. A series of surveys undertaken by the *Architects Journal* provides one of the few data sets relating to student perceptions of the issue. Although the questions have not remained constant over time, the results clearly indicate a growth trend with respect to experience of mental health challenges. This is echoed by two other independent studies.

Whilst not the focus of this study, international studies from Turkey and Australia cite statistics that broadly correspond to the key perceptions of UK students. Comparisons of prevalence in relation to other professional disciplines, but not specifically their respective education processes, suggest that creative disciplines may exhibit higher incidences of mental health issues, although it is noted that this includes a very broad range of subjects. However, there is also some evidence that a greater percentage of students with specific disorders are attracted to creative subjects.

Medicine and law were also identified as disciplines in which levels of stress, anxiety, and depression were recorded to be higher than normative levels. However, while there may appear to be some similarities, little can be gleaned from these studies beyond broad observations of prevalence.

A number of key themes have emerged from the literature review, which are manifest through a broad range of studies, commentary, and data sources. These include the following, a number of which relate to the pedagogies typically adopted in architecture education:

- The complexity and currency of issues with respect to curriculum design: workloads, shared expectations (hidden curriculum), long hours, personal exposure, academic stretch
- Other contributory factors: costs of course, length of course, age (experience), gender, international student experience, peer influences, social media, family / peer pressure, pre-existing health conditions
- The quality of support provided to students at course and institutional levels: lines of communications / support responsibilities
- Identification of the key symptoms and associated issues of diagnosis / self-diagnosis (depression / anxiety / stress / burn-out)

The issues cited above, in particular those relating to pedagogy and aspects of course design, informed the design of the survey that all UK validated schools were invited to engage with, as well as the topics of the subsequent semi-structured telephone interviews.

4 SURVEY RESULTS

4.1 METHODOLOGY

From the time of this inquiry's inception through to the time of writing, an immediate issue became the speed of change within the sector. Mental health in higher education has rapidly become a prominent topic in both academic and popular media, with related news stories appearing to occur more frequently than at any time in the past decade or beyond. Institutional systems and national policies have proliferated rapidly in response to the perceived rise in mental-health related incidents across the UK nations.

The rise in reported cases presented an immediate question with respect to whether architecture education could be considered as prone to particular issues of mental well-being, emergent from the cultures and practices of this specific discipline, or whether the rise in reported mental health incidents was part of the wider national picture for higher education, with architecture suffering from the same contributory factors as other subjects. In order to bring focus to the enquiry, the authors set a time limit for the literature review in order that an analysis could be undertaken with the objective of identifying emergent themes of relevance, thus informing the development of a survey targeting the experiences of teaching and support staff in RIBA validated schools of architecture in the U.K. The limitation to UK schools was determined by the objective of understanding the reality underpinning the coverage of the issues in the UK media. It also related to the available evidence base, validated through a high degree of curricular and structural parity across UK schools of architecture. The emergent survey questions are provided in Appendix 2

The survey also invited respondents to volunteer to participate in a telephone interview to provide the opportunity to elaborate on views held in relation to the survey questions, and to highlight work being undertaken in their own contexts that aimed to support or promote student mental health and well-being.

4.2 EMERGENT THEMES FROM THE LITERATURE

As noted previously, emergent issues from the literature review included the scale of diagnosed and suspected mental health disorders in cohorts of architecture schools; academic and support staff engagement with student architects, and the variety of types of interactions; differences in perceived and recorded manifestations of mental ill-health in architecture cohorts (e.g. anxiety, depression, stress related disorders, or other illnesses), and whether students correlated these with their course experiences; comparisons of architecture with other disciplines in terms of the likelihood of mental health issues being diagnosed and reported; causal factors in the curriculum of architecture; and other emergent contributory factors identified within the literature.

Overarching themes emerging from the literature review, as outlined in 3.4.3, contributed to the formulation of the survey questions discussed in Section 4.1. An initial draft of the on-line survey was piloted with a member of Northumbria University's support staff in order to ascertain whether the questions were clearly stated and provided sufficient options for responses. The final survey was consequently amended in light of this preliminary testing. The final survey questions are provided in Appendix 2. The outcomes of this on-line survey, which was conducted throughout the summer and autumn of 2019, are discussed in Section 4.3.

4.3 SURVEY OF ACADEMIC AND SUPPORT STAFF: RESULTS

Student surveys, educational research, institutional policy initiatives and associated inquiries cited within the literature review highlighted key aspects of the architecture curriculum that are potential contributory factors in the rise of mental ill-health in the discipline. These included long working hours (Bachman & Bachman, 2006); heavy workloads (AIAS, 2002); the culture of the 'crit' as a potentially adversarial experience (Sara & Parnell, 2014); competition within the studio environment and peer pressure / pressure from staff (Monaghan, 2001); work-life balance (Holgate & Jones, 2011); the increasing costs of study, particularly in a course of five years duration that incurs additional expenses via materials, printing, production and field study visits etc. (Vowles et al., 2015); family commitments and pressures; employment pressures (including the necessity of some students to work during their studies); additional pressures, for example, an increasing perception that a 'good degree' classification is an absolute necessity for future academic and professional success.

In recognition of the rapidly changing landscape of higher education, and the perceived rise of mental health incidents, respondents were asked if they were aware of changes to the curriculum that have sought to alleviate such issues, and at what level these had been implemented (e.g. modular, course or programme, departmental or institutional). Cultural factors were also addressed, in particular age and gender. The survey was justifiably criticised for citing 'nationality' as a potential differentiating factor in students with respect to the incidence of mental health challenges, an insufficient categorisation given the complexities of ethnicity and cultural background. Indeed, this subject is worthy of a more nuanced study, as became clear in responses following completion of the survey. The levels and types of support afforded by courses / programmes and institutions was also addressed in the survey, including a question as to whether tailored support for architecture students is provided and, if so, whether it is effective.

The survey was launched in June 2019 following an opportunity in May 2019 to introduce it and the broader research aims to the Standing Conference of Heads of Schools of Architecture (SCHOSA) conference. Focusing on gathering responses chiefly from course leaders, heads of schools and academic support staff, all validated UK architecture schools were asked to distribute the survey amongst academic colleagues as well as encourage the participation of central support staff in order to garner the widest range of responses. The survey comprised 29 questions and was conducted on-line using 'Survey Monkey' software. Initial participation was relatively slow, particularly in terms of responses from central support staff, so the survey deadline was extended to October 2019. On completion, 83 participants took part in the survey, representing 27 schools of architecture across the UK. The majority of participants were academic staff, with 9 pastoral support staff providing data. Initial findings were reported at the SCHOSA conference of November 2019 as follows:

- The issues of mental health in architecture education appeared to be substantially acknowledged and recognised by the responding academics and support staff
- Around 84% of respondents were aware of diagnosed issues within cohorts of architecture students; 66% similarly suspect undiagnosed mental health issues within their students, indicating that non-disclosure of barriers to well-being remained prevalent (Q27)
- Contributory factors of curricular design were recognised by both academics and support staff (Q10, Q28); these included heavy workloads, long hours, peer pressure, course costs as key contributory factors; additionally, support staff placed 'pressure from academic staff'

highly within their responses

- Anxiety and stress related illnesses appeared to be key manifestations of mental health issues in architecture, however, several other manifestations of ill-health were manifest (Q9)
- 50% of respondents stated a belief that architecture students were more likely to experience mental health issues; however, only one third of the academic support staff stated a similar viewpoint
- In line with the literature review findings, respondents similarly recognised institutional and programme specific initiatives to address mental well-being (Q13, Q14)
- Referral to centralised student support appeared to be the key tool employed by academics in the support of students
- Through this survey, cultural factors of age, nationality, gender were not reported as being substantially correlated to mental health; however, the researchers acknowledged that this question was perhaps poorly stated, and that the interview responses (q.v.) provided some conflicting evidence for this claim.

The small number of responses from personnel in support departments prevented a reliable indication being obtained of the comparison in the profile of architecture students with respect to mental health issues relative to other subject areas or institutional norms. This may provide an area for deeper interrogation in the future.

4.3.1 Qualitative Responses

The results from the survey were subsequently analysed in order to identify emergent themes that would form the basis of semi-structured interviews with academics who self-selected themselves for participation. Through this analysis, a smaller number of focused questions, responding to the generalised findings of the survey (see previous section) were formulated. These are presented in Appendix 3. Volunteers for the semi-structured interviews were provided with consent forms in advance of the discussions, these stating the aims of the research, the questions to be asked, and stating compliance with appropriate ethical guidelines (BERA, 2004). All responses have been anonymised for the purpose of this report, and interviewees were allowed to withdraw from the inquiry should they so wish. Nine teaching staff and one support tutor from a number of institutions across the United Kingdom volunteered to participate in these telephone interviews, which took place through December 2019 to January 2020; only seven of the teaching staff participated as of the end of January 2020. These conversations were recorded by consent and transcribed accordingly. The interviewees' collective experiences, initiatives, interventions and suggestions are outlined in the following sections (Sections 4.3.1.1 to 4.3.1.8), which summarise key points arising from these discussions of mental health in architecture education.

4.3.1.1 Workload / work-life balance

In general, the open-ended, iterative and indeterminate nature of architecture education was recognised by participants as being problematic in setting achievable student expectations and their self-management of the academic workload. In response to this issue, a number of courses appeared to be reviewing assessment workloads, either through a reduction of the number of modules through the course (consequently reducing the number of assignments issued and scheduling these accordingly to prevent clashes), or via a more rigorous consideration of what is achievable within the notional student workloads assigned to modules in relation to the academic credit system. Structuring modules around semesters of courses / programmes was also viewed as

an appropriate method to reduce the 'high stakes' pressures of year-long summative assessments, as well as to provide earlier warning of potential student issues. In a similar vein, incrementally setting achievable targets in the early years was offered as a way of educating students to use their time wisely and productively, inculcating the discipline of completing assignments on time. One course provided specific time-management teaching in foundation modules, and suggested this could be mandatory in the undergraduate course, offering valuable transferrable learning and application to the practicalities of running a practice (RIBA, 2014). Equally, a call for aligned and co-operative syllabus design within programmes was made, this ensuring parity and clarity are achieved, with course leaders prioritising quality over quantity in meeting the RIBA / ARB General Criteria and achieving the desired Graduate Attributes, all to the students' benefit. Discussion also considered whether course alignment to a simplified set of criteria would achieve a more sustainable and practicable set of learning outcomes in lieu of the 44 criteria published jointly by the RIBA and the Architects Registration Board (op. cit.). At a time when the Criteria are under review, this point is particularly topical.

Scheduling studio design projects to be submitted well ahead of reviews had been adopted by some as a mechanism for promoting the development of time management skills amongst students, and to facilitate full student engagement in design reviews following the opportunity for a good night's sleep. In general, signalling the need for students to 'calm down', adopt a longer-term perspective in relation to their studies, and accept constructive critique of their work as a pre-requisite to successful and healthy study, was identified. Similarly, refuting the notion of any sort of failure when students elect to leave the course or leave after completing Part 1 or Part 2, was viewed as a positive approach. It was however widely acknowledged that architecture course inevitably requires hard work, as well as the ability to continually cope with complexity and resilience, all attributes conducive to continual professional learning (Deakin-Crick et al. 2004).

4.3.1.2 Peer pressure, staff pressure, and competitiveness

A number of respondents reported careful consideration of where particular tutors' soft skills would fit best within the delivery of curricula, acknowledging a wide divergence of social skills and emotional intelligence encountered within permanent and temporary staff bases. Care was being taken by many to ensure that part-time staff and guest reviewers become increasingly familiarised with the social learning ethos underpinning learning in their curricula, aspects of which may be divergent from the teaching practices experienced by academic staff in their own education (Ochsner, op. cit.). Precepts of authentic collaborative practice were contradicted by a residual emphasis on the studio tutor as 'connoisseur' (Webster, 2007b). Reported 'competition' between academics, reflecting the notion of charismatic inculcation (Stevens, 1998; Thompson, 2019) appears to remain prevalent in the academy. The increasing casualisation of staff in the higher education sphere was similarly viewed as a compounding factor in eroding relationships between students and staff, compounded by the lack of 'academic space' afforded to full time academics through institutional demands for teaching, research and service excellence. As discussed below, academics challenged the automatic assumption of the studio as an invariably supportive learning environment, identifying the generation of cliques within larger studios as being potentially problematic. However, whilst a competitive dynamic was regarded as playing a positive role in learning, it was recognised that there are limits to this. Developing a supportive community of learning through vertical studios, and employing upper years students to review and/or mentor first

and second year undergraduates were seen as methods to encourage peer support and guidance in lieu of negative competitive behaviours between students.

4.3.1.3 Cost of study

Spanning five years and incurring repeated material and other incidental costs, architecture courses are expensive, with students typically incurring substantial debts for students in comparison with those from many other subject areas. The length of study is a key factor here, being sometimes accentuated by low salaries or, on occasion, exploitative employer behaviour during periods of professional experience. A number of course leaders are tackling course costs by viewing these through the lens of sustainability, encouraging the use of recycled materials, reviewing study trip options, and so on. Some respondents cited ongoing work that emphasises models as vehicles for process and development rather than as artefacts, seeking final representations through more affordable, often digital media. However, while the push for electronic learning methods and materials appears to support economic benefits for the student, caution was sounded regarding the loss of 'hard copies', for example, for students with dyslexia or those students who prefer to use text as a working document. It was observed that there is a tendency amongst some courses to become caught up in a culture of production in which quantity can be valued over quality, this arguably facilitated by digital technologies that make extensive high-quality production accessible and seductive. However, this aspect of student portfolios requires critical consideration as it can contribute significantly to expense, the demands on student time, and the teaching of practical efficiency of the design process, a skill valued by professional practice. More positively, the use of digital presentations at reviews dissolved the necessity of printing costs, whilst developing professional skills in communications, and reducing anxieties related to printing queues and plotting quality. Where printing remained a requirement, affordability drove one tutor's choices of output requirements, e.g. specifying A3 black and white in lieu of larger, more expensive colour plots. Some schools are also addressing expenses through practical subsidies; free materials and printing, budgets for award year exhibitions, materials provided at cost, provision of recycling bins, and materials off-cuts being provided by local businesses.

High levels of poverty in student cohorts was reported, with numbers of students applying for hardship bursaries. Some architecture students were reported to be accessing food banks, and being unable to afford the basic tools of design, such as technical pens and model-making knives. One successful curricular intervention to address this issue has been the aforementioned delivery of a financial planning module to assist students towards self-efficacy in money management.

4.3.1.4 Learning environments

The assumption that design studio inevitably represents an exemplary learning environment was challenged by the interviewees in several respects. Claims of inclusivity were contradicted by issues such as space provision and allocations (for example, practices of students having to 'book' studio spaces and times, and carry equipment and drawings away with them following their 'shift'), or the acknowledgement that many students would be 'de facto' remote learners, often having to work from parental homes because of cost constraints and / or external commitments. The public exposure of skills and abilities through the learning process was not seen as being beneficial for every learner, increasing anxiety in some. Similarly, self-identification with studio outputs was seen as potentially problematic, with some students viewing critique as a personal attack (Gomez-Lanier, op. cit.). Respondents noted that a conceptual disaggregation of the author and the process could

potentially lead to better self-evaluation of rational design thinking. Some students were said to have reported anxiety within large studio spaces due to noise levels and the number of people. These issues appear to become more pronounced where there are institutional drives towards increased student numbers. Alternatively, pressures on space via institutional estates policies appear to have also resulted in reduced opportunity for private conversations in some situations.

4.3.1.5 Support systems

The point of contact for pastoral support remains a contentious issue, with the studio leader or year leader often appearing to be the dominant figure in the student's engagement with the wider institution. This can reduce the potential efficacy of institutional pastoral support systems, particularly in the allocation of a constant pastoral tutor for the duration of a student's journey through the course. As noted above, some studio tutors remained prone to self-presentation as charismatic 'exemplars', rather than co-operative and communicative facilitators of learning (Stevens, 1995). However, two institutions reported the successful employment of 'student success advisors' who acted as intermediaries between students, staff and support services. This role was clearly defined as being subject / discipline specific, with the advisor assisting on issues of accommodation and personal extenuating circumstances as well as mental health. However, this was generally reported to be a stressful role for the advisor; worryingly, the mental well-being of both support and academic staff became an emergent theme through this series of interviews.

4.3.1.6 Curricular Design

Many participants perceived architectural education as an obstinate locus of tacit knowledge, wherein learning and assessment methods can be opaque and contradictory, reflecting entrenched cultures rather than sound and reflective educational practices. Clarity of shared expectations (amongst students and tutors) was viewed as being generally poor and a major contribution to student confusion and consequent anxiety. The first year was seen by a number of contributors to play a particularly important role in instilling good study habits (Bovill et. al., 2011), particularly in bringing students quickly to a point of shared understanding of expectations in the education process. Indeed, emphasis on developing understanding of the learner journey in students extended to staff initiatives with foundation courses and study taster days. Group assignments were seen to help in this respect, and their introduction throughout the curriculum was seen to bring additional benefits beyond collaborative working, through acculturating 'new' students with cohorts that may have already coalesced into social groupings. Late enrolment was also viewed as a repeated cause for student anxiety (Kuh et al., 2006).

Assessment and feedback, historically generating low scores in the National Student Satisfaction Survey, appeared to suffer from a lack of relevant academic literacies in the student body (Race, 2015), exacerbated by opaque tutor guidance within architecture curricula. Participants encouraged students to critically engage with one another's work, under the supportive guidance of tutors, towards the establishment of common benchmarks of qualitative and quantitative outputs between cohorts and staff. Interviewees also reflected upon the normative prioritisation of design studio within the curriculum, and the widespread perception of the dominance of studio work over other taught elements, often to the expense of the rest of the syllabus. As aforementioned, the five-year curriculum is already packed in order to satisfy the joint criteria, with new content being proposed continually by the profession or thorough external bodies. Interviewees also noted a perceived lack

of attention to the softer skills of verbal and written communications, professionalism, confidence building, and collegiality within the curriculum. It was also reported that standards of traditional literacy were often poor in new cohorts, with a tendency to use the grammar of social media in lieu of expected standards of academic writing. More broadly, the subject of an academic skills gap between secondary and higher education was highlighted by several interviewees, as was the lack of critical practice in architectural education, in which unreflective tutorial and review methods remain stubbornly fixed, especially in studio-based teaching. This lack of engagement with wider pedagogical research may in part be an issue of institutional demands on staff time, although all interviewees were clear champions and advocates of a critically reflective approach to educational practice, rejecting the notion of a singular pedagogic paradigm for such a diverse subject. An example of this was one respondent's opinion that 'stretched' learning of architecture, and the possible opportunity to take longer to complete studies, was not necessarily a problematic premise, so long as aspects of funding and flexibility could be resolved.

4.3.1.7 Student Profiles

In some contrast to the survey results, the interviewees identified clear issues regarding diversity and inclusivity within architectural education. Black, Asian and minority ethnic students appeared to be marginalised within studios, and sometimes excluded from informal support systems. Anecdotally, female students from these groups appeared to suffer from a particular lack of confidence (with patriarchal pressures being identified as contributory factors). Some young black males were reported to evidence a 'brittle confidence' in their studies. Such observations did not deny the clear abilities of these students to thrive in architectural education and practice with appropriate opportunities and support. However, the lack of relatable and visible role models, both in the academy as well as in the profession's media served to reinforce these students' anxieties regarding belonging in architecture. On a related theme, and as a consequence of the laudable promotion of inclusivity and widening access in higher education, many students at 'new universities' were the first in their families to enter higher education. In the terms of Bourdieu, their lack of cultural capital in this new arena also evidenced itself through diminished self-confidence in the educational environment or discipline. International students were reported to be prone to marginalisation and isolation (sometimes through institutional policies, such as allocations to student accommodation), exacerbating issues of their successful integration into studio communities. Levels of actual and expected debt levels, together with familial pressures, were perceived to frequently contribute heavily to issues of anxiety and depression in international students. The critical importance of well-run architecture student societies was noted as one of the key drivers in developing inclusive communities of learning to counter many of the issues noted above.

As noted with respect to 'Curricular Design' in the previous section, the need for schools of architecture to fill key gaps in the education of students emerging from colleges and secondary schools was cited extensively. The ability of individuals to assume 'ownership' of their own learning was not always evidenced sufficiently by students, many of whom were perceived to be schooled to pass examinations at secondary level, rather than to achieve deep learning. Consequently, these students' expectations of continued high grades were confounded by the new demands of the architecture studio, and the rejection of rote learning; notions of 'wicked problems' or of 'learning through mistakes' (or failure, for that matter) appeared to be alien precepts. In short, the increasing marketisation of higher education as a transaction, coupled with student perceptions of entitlement,

were seen to be oppositional to the interviewees' aspirations of transformative learning (Mezirow, 1997).

Commonly, student expectations of the architectural profession appeared to be coloured by naïve notions of celebrity and reward. Whereas media depictions of the profession may prove attractive to students, these are typically unrealistic. Perceptions of remuneration and status can be misguided, though such images of the profession are not always critically challenged within schools. Within the studio, student perceptions of 'favouritism' continued to require action; ensuring that staff act professionally and impartially in their interpersonal relationships appeared to need reinforcement. More positive actions in this area included the participants' active display and celebration of all students and their outputs, in lieu of 'curated' presentations of work. All represented schools were clearly committed to diversity and inclusivity. Beyond the aforementioned issues of mental health, their students also suffered from physical disabilities, dyslexia, dyspraxia, ADHD, autism, narcolepsy, PTSD etc. with many students declaring diagnoses that stemmed back to secondary education. Hidden issues were reported to often emerge in second year and 'explode' in the third year. However, the rise in mental health awareness was also seen as encouraging a student language of over-exaggeration where certain stressors would be treated with insufficient perspective, similarly contributing to the increasing numbers of self-referrals.

4.3.1.8 Other contributory factors

At a philosophical level, architecture practice (with parallels to architecture education) was perceived to be a confused, 'anxious' profession. Perceived disconnections between education and practice, between self-identification as an individualist or as a collaborative practitioner, between media representations and authentic practice, and between varying concepts of professionalism and artistry, were all factors capable of inducing cognitive dissonance in the student body (Bachman & Bachman, 2010). Architecture was viewed as an 'ill-disciplined discipline', albeit a profession clinging to normative assumptions that remained unchallenged, particularly when viewed as a set of practices rather than as clear aims and objectives linked to education and practice. Although this study tacitly considered undergraduate courses as the main area of inquiry, respondents highlighted the particular pressures encountered by Part III students, who were attempting to balance work and study demands (Low, 2019). At this stage in their professional development, Part III students often held considerable responsibilities within their practices, acting as architects in all but title. A deeper inquiry into this field may have wider implications given the increasing prevalence of 'earn and learn' developments in architecture education, including the newly established Degree Apprenticeship programmes.

Finally, although more of a societal or peer-influenced issue than a factor directly correlated to architecture education, the widespread use and abuse of drugs was cited as a key factor in some institutions as a contributory factor in mental health issues.

4.4 SUMMARY DISCUSSION

This initial study has sought to triangulate the current discussion of student mental health in UK architectural education through a tripartite study of a) the research base evidenced in literature, b) a focused survey deriving questions from the literature review, and c) the documentation of a range of experiences and opinions amongst academics and support staff affiliated to the subject. The literature review evidenced the rapid evolution of policy developments and inquiries regarding

mental health in Higher Education, with universities, charities, governmental bodies and charities all contributing to the discussion. The student body has been particularly incisive in this respect, albeit through divergent and small-scale efforts, and it is possible that a more comprehensive survey of the student population in architecture education would give a more accurate picture of the state of the student experience. Similarly, this study could not definitively ascertain whether or not the experiences of architecture students were any better or worse than those of students studying other subjects in UK Universities. A future study might concentrate on eliciting more responses from pastoral support staff across relevant HEIs, who have a more comprehensive purview of mental health issues across the range of university provision.

The on-line survey was completed by nearly half of the RIBA validated architecture courses in the UK. Emergent themes of workload balance, competitive pressures and the costs of architecture education arose as key contributory factors to poor mental health, and these issues formed the basis of a set of questions posed to key academics from several schools of architecture from UK universities. These key findings have been discussed in Section 4.3. While the responses reflect the views and experiences of a very small (and engaged) proportion of academics in UK schools of architecture, the practical initiatives enacted by the interviewees demonstrate both an understanding and a considered response to the pressing issue of mental health and well-being in curricula of architecture. It is therefore hoped that the analysis provided may be utilised towards curricular designs that more successfully addresses the range of highlighted concerns.

Areas for future research, subject to funding and institutional co-operation, could include the development of guidance for schools of architecture, building upon some of the best practice evidenced in several institutions. Other areas of potential inquiry emerging from this project include a more forensic examination of different pressures at the three stages of architectural education in the UK, Part I, Part II and Part III. Anecdotal responses infer that students entering Part 2 are more resilient, having experienced the pressures of Part I; however, this can also infer that talented students may not continue their studies of architecture, or enter the profession because of the barriers encountered in these early stages. As a corollary, the impact of Part 3 study is rarely discussed in terms of student welfare, with these students often holding positions of considerable responsibility within practices, whilst simultaneously studying for their summative award. Furthermore, this research project has elicited expressions of interest from practitioners themselves, with an inference that professional practice has ample room for improvement with respect to the care and wellbeing of qualified architects.

This study provides an insight into some of the key themes and trends emerging from the debate about student mental health in UK architecture education. It also discusses the specific context of architectural education and illustrates the experience of many of the students studying architecture at higher education institutions in the UK. Two key questions are prompted, as follows:

1. Is there a requirement for tailored mental health and wellbeing support for architecture students?
2. Could changes in pedagogy, culture, and / or behaviours support better mental health and wellbeing amongst architecture students?

4.4.1 The case for tailored mental health and wellbeing support for architecture students

It is clear that there are differences between architectural education and the way most other courses are taught within higher education institutions. Architecture students learn primarily through a studio-based experience, and must learn to publicly defend their work in 'crit' or 'review' events, which in some instances may be directly linked to assessment. There is a culture of long hours, perpetuated by the open-ended design element of their course, and the education process extends for a longer period than for most other university students. The long course of study has an impact on finances, with many students (especially in England and Wales) expecting to graduate with large debts. The course itself can be expensive on a daily basis, with many students having to buy materials for models or pay for trips, with the majority of architecture students saying they need financial help from their family to pay for their course. Hence, many more students are taking on part time work to make ends meet.

However, there are also some positives in the way architecture is taught. The studio experience is said to be intense, yet creates a tightly-knit cohort of students. And these are students who commonly see each other for many more hours a day than other university students might expect to have contact with their classmates. That said, those who cannot commit to immersing themselves in the experience in this way, through whatever circumstances, may feel excluded from the peer group, and feel less confident about their future academic performance as a result.

It could be argued that the above factors would support the case for tailored mental health and wellbeing support for architecture students, beyond the university-wide support services already offered. Institutions that are already doing this have focused on peer mentoring schemes or dedicated advisers who know the architectural education context, and may offer a pointer to future support provided more generally. Conversely, if one considers the services already offered by most universities, these commonly involve support by people who are perhaps unaware of the culture of architecture education. This has a positive dimension in that it maintains a complete objectivity, ensuring that the student's interests are placed at the heart of any guidance offered.

4.4.2 Some Practical Ideas

Architecture may be an 'anxious profession', one centred around design, creativity, and hard work with 'no right answers', no absolutes. It remains to be seen whether the global shift towards a wider acceptance of mental health issues, and the reduction of stigma associated with their acknowledgement and of obtaining help, will serve to shift attitudes around what is an acceptable amount of stress to put on a human being (or for individuals to place on themselves). The narrative around 'mental health literacy' and knowing what is 'normal' and what is indicative of a mental health issue, could be incorporated into staff dialogue with their students, and more formally into induction programs, and other similar points of information and guidance.

4.4.3 Pedagogic or culture change

It is evident that the culture and practices that underpin architecture education have the potential to put undue stress on students and, despite a significantly increased awareness of this in relation to key aspects of the pedagogies typically employed, contributions from academics suggest that traditional professional and educational behaviours and norms remain.

More fundamentally, achieving meaningful change in the deeply embedded cultures of practice within architecture education is a slow process, albeit one that has seen considerable distance

covered in recent years, especially in aspects relating to the studio-based review, and the effectiveness of dialogue and critique. Nevertheless, vestiges of traditional ways of doing things can remain obstinate. The last 25 years or so has seen a significant step forward in the development of a wider understanding amongst educators of their teaching practices from the perspective of educational theory rather than from the perspective of course or project outcome (i.e. an architectural perspective). Yet, contrary to workplace studies on productivity, architecture education appears to be wedded to a paradigm of high (not necessarily efficient) production, arguing unreflectively that 'this is the way things are done'. The changing nature of the student population generally, coupled with the national drive for inclusion and diversity through widening access programmes, may run counter this entrenched belief-system, and the collision of these conflicting demands may well be contributing to the increases in the prevalence of student mental health problems that this study documents.

There has been some discussion in recent years about reducing course length, but ultimately this is in the hands of regulators, and there are no significant changes on the horizon. A few schools are exploring models that intensify delivery so that timeframes may be shortened, exploiting the limited latitude that is available. However, whilst financially advantageous, it is unlikely to be a solution that has much that is positive to offer the wellbeing of the majority of students. Alternatively, the relatively new apprenticeship model offers an option for those wishing to pursue a career in architecture, but who may feel excluded from the traditional model of 5 years full-time study; again, while the financial benefits of the apprenticeship model may be evident, the apprentice's well-being is highly dependent upon balancing the demands of both the educational provider and the employer.

Lastly, the incidence of mental health challenges in architecture education, in particular levels of anxiety relating to affordability, length of course, and ability to clear debt through employment, suggests that the profession might carefully reconsider the relationship between the scale of national education provision and projected levels of graduate demand across the profession, as some other professions do.

5 CONCLUSIONS

5.1 CONCLUSIONS

This study seeks to present an overview of student mental health in UK architecture students, drawing on existing literature, a survey of UK schools validated by the RIBA, and a series of telephone interviews with a number of engaged academics, who have kindly volunteered to share their experiences and actions as a further contribution to a collective understanding of the issue. The area of student mental health and its support and management represents a rapidly evolving landscape, this being fuelled by the combination of the duty of care that higher education providers have for their students, and the widespread media interest in the subject in general.

At a national level, through the leadership of bodies such as Universities UK and the Office for Students, initiatives have been introduced to promote student well-being and improve the support structures in place, with some institutions demonstrating additional levels of engagement through their own developments.

The review of the literature demonstrates that there is a significant and growing instance of UK architecture students with mental health problems, although exactly how this compares to the wider statistical profile of students in higher education nationally is less clear. However, the length of the course and the resultant financial commitment involved, coupled with deeply entrenched cultural expectations of long hours of study, are perceived by many students, and some academics, as contributing to the challenges.

The pedagogies adopted by architecture education are both enduring, with a history extending back some 200 years, and essentially universal. Whilst this speaks of their qualities, value, and effectiveness, the corollary is that methods have tended to be passed down through generations of educators uncritically, certainly until relatively recently. Moreover, the constancy of the fundamental educational ethos fails to acknowledge the changing nature of the student body over time, and the challenges cited by students that relate to pedagogy suggest that many of the hitherto accepted cultural norms and practices are increasingly in conflict with the demands of contemporary student life. Equally, normative approaches to architectural education may fail to acknowledge change within the secondary education system from which the majority of students directly come.

Issues such as long hours of study, the costs incurred, and the perception that working long hours is necessary in order to achieve, are commonly cited. The ability to immerse oneself in one's studies is a privilege that favours some to the exclusion of others. Those students who must work to fund their studies, or who have family or carer commitments that run in parallel, can quickly feel disadvantaged, with their limited ability to participate in the studio community propagating a sense of marginalisation from their peer group. Equally, whilst transition to higher education, and to a novel and indeterminate subject such as architecture, can prove daunting for many, the increasing number of students embarking on courses through widening access programmes brings an increasing number for whom confidence and self-belief require nurturing through the education process. Learning processes based on discourse and critique have long proved challenging for many architecture students, especially during the initial stages of study, but so much more so for those

who lack a sense of belonging or, for example, are not from backgrounds that have helped develop a cultural awareness of the world.

In common with the literature pertaining to pedagogy within architecture education, conversations with academics through semi-structured interviews confirms that it is not necessarily only the pedagogic methods that are in question, but how they are enacted within a social learning environment. The behaviours of tutors, and the expectations and values that underpin these, were frequently seen to be the source of difficulty, often being adopted unreflectively as inherited traditions, with academics unquestioningly teaching as they themselves were taught. Critical reflection by some architectural educationalists has led to the development of a range of actions aimed at mitigating the impact on students through modification of learning processes, or of expectations placed on students, as well as the implementation of augmented support structures. Nevertheless, some academics raised questions about the intensity of curricula and the seemingly limited scope for the introduction of significant change.

In summary, UK architecture schools are witnessing a growth of mental health problems amongst their students, but are generally at the point of transition between awareness of the issue and the implementation of clear mitigating actions. Importantly, there appears to be a strong collective will to address this trend, and to share experiences and actions for the common good.

5.2 FURTHER RESEARCH

The issue of student mental health is complex and multi-faceted. Whilst there are a number of positive actions being taken by individual schools, departments and course teams, these tend to be reactive in nature. From a more proactive perspective, the question arises as to how a curriculum might be designed to address many of the challenges identified, as well as explicitly develop attributes such as resilience, confidence, etc, and it is suggested that this would be valuable as further research.

From the outset of this inquiry, a key issue has been the quality, quantity, focus and comprehensiveness of data collection and responses to the central themes of this research. The voluntary participation of schools and academics has been essential to completion of this report. However, it is acknowledged that a more rigorous, comprehensive and (perhaps) obligatory industry or professional body-led research project would more accurately uncover a fuller picture of the state of provision for mental health and wellbeing support in UK schools of architecture.

6 REFERENCES

- ABS, 2019a. #anxietyarch. Architects Benevolent Society. <http://absnet.org.uk/need-help/how-we-help/mental-health-support/anxiety-arch>
- ABS, 2019b. ABS Launches New Support For Students. Architects Benevolent Society. <http://absnet.org.uk/news/abs-launches-new-support-students>
- ABS, 2019c. The Architects' Mental Wellbeing Forum. Architects Benevolent Society. <http://absnet.org.uk/news/architects-mental-wellbeing-forum>
- AIA Editor, (2016a) Feeling Stressed? 20 May, <http://aia-brighton.org/2016/dont-get-stressed/>
- AIA Editor, (2016b) A sense of belonging. 2 August, <http://aia-brighton.org/2016/a-sense-of-belonging/>
- AIA Editor, (2017) Good stress: Bad stress. 1 March, <http://aia-brighton.org/2017/good-stress-bad-stress/>
- AIA Editor, (2018) Architorture... it doesn't have to be: Mental Health Awareness. The University of Brighton Architecture & Interior Architecture Blog, 23 May. <http://aia-brighton.org/2018/architorture-doesnt-have-to-be/>
- AIAS (American Institute of Architecture Students) (2016) Studio culture: Stories and interpretations. <http://www.aias.org/wp-content/uploads/2016/08/Studio-Culture-Stories-and-Interpretations.pdf>
- Alawad, A., & Slamah, A. (2014). The prevalence of stress among interior design and furniture students. *European Scientific Journal*, 10(23).
- ARB, 2019. Support and further information for students. Student Handbook. <http://students.arb.org.uk/support-for-students/>
- Argyris, C. In: Frederickson, M. P. (1992) *Gender and Racial Bias in Design Juries*. In (1992) *Architectural Education: Where We Are*. Proceedings of the 80th Annual Meeting of the Association of Collegiate Schools of Architecture, held at University of California and University of Arizona.
- Aronin, S., & Smith, M. (2016). One in four students suffer from mental health problems. YouGov UK. <https://yougov.co.uk/topics/lifestyle/articles-reports/2016/08/09/quarter-britains-students-are-afflicted-mental-hea>
- Arslan, G., Ayranci, U., Unsal, A., & Arslantas, D. (2009). Prevalence of depression, its correlates among students, and its effect on health-related quality of life in a Turkish university. *Upsala journal of medical sciences*, 114(3), 170-177.
- Austerlitz, A. and Aravot, I. In: Salama, A. and Wilkinson, N. (Ed.) (2007) *Design Studio Pedagogy: Horizons for the Future*. Gateshead, The Urban International Press, pp.233-246.
- Bacchi, S., & Licinio, J. (2015). Qualitative literature review of the prevalence of depression in medical students compared to students in non-medical degrees. *Academic Psychiatry*, 39(3), 293-299.
- Bachman, L.R. and Bachman, C. (2006) 'Student Perceptions of Academic Workload in Architectural Education', *Journal of Architectural and Planning Research*, 23 (Winter 2006), pp. 271-304.

BERA (2004) Revised Ethical Guidelines for Educational Research. Southwell: British Educational Research Association.

Birmingham City University, 2019. Level Up team. Birmingham School of Architecture and Design. <http://www.bcu.ac.uk/architecture-and-design/the-student-experience/level-up/team>

Bíró, É., Balajti, I., Ádány, R., & Kósa, K. (2010). Determinants of mental well-being in medical students. *Social psychiatry and psychiatric epidemiology*, 45(2), 253-258.

Blair, B. (2007). At the end of a huge crit in the summer, it was crap I'd worked really hard but all she said was fine and I was gutted. *Art, Design and Communication in Higher Education*, 5, 83–95.

Boyer, E. L. and Mitgang, L. D. (1996) *Building Community: A New Future for Architecture Education and Practice*. Princeton, The Carnegie Foundation for the Advancement of Teaching.

Braidwood E., and Waite R. (2017) Cash-strapped and stressed: the realities of studying architecture in 2017. *Architects' Journal*. Vol 244, Iss.14, pp.10-14.

Brown, P. 2016 The invisible problem? Improving students' mental health. HEPI, 22 September.

Brown J. S. L. (2018) Student mental health: some answers and more questions, *Journal of Mental Health*, 27:3, 193-196.

Brown, R. and Moreau, D. (2002). 'Finding Your Way in the Dark', Shared Visions Conference, Brighton University; 'Finding Your Way in the Dark' [Online] Available at www.palatine.ac.uk/files/846.pdf

Buchan, L. 2018. Students wait up to nine months for mental health support at UK universities. *The Independent*, 2 January.

Busby, E., 2018a. Universities should do more to tackle growing student mental health crisis, *The Independent*, 15 August.

Busby, E., 2018b. Call for UCAS forms to take stigma out of mental health problems seen as 'disability', *The Independent*, 10 September.

Busby, E., 2018c. Prioritising student mental health is 'non-negotiable', minister tells university bosses; 'To make this happen, leadership from the top is essential'. *The Independent*, 16 September.

Bussey, K., 2017. Counsellor service sees 45,000 students, *The Herald*, 4 December.

Carmichael, S.G. (2015). *The Research is Clear: Long Hours Backfires for People and Companies*. Harvard Business Review.

Celik, G.T., & Oral, E.L. (2013) 'Burnout Levels and Personality Traits – the Case of Turkish Architectural Students'. In; *Creative Education*, 2013, Vol. 4, No. 2, pp. 124-131

Ciravoglu, A. (2003) *On the Formal and Informal Studies in Architectural Design*, Aysen Ciravoglu, Yildiz Technical Faculty of Architecture, Istanbul. In: *Writings in Architectural Education: EAAE Transaction on architectural education*, 15, 58-71, Copenhagen: EAAE, pp.176-187.

Collewet, M. & Sauermann, J. (2017). *Working Hours and Productivity*. *Labour Economics*. Volume 47, August 2017, 96-100.

Cuff, D. (1991) *Architecture: The Story of Practice*. Cambridge, MA, MIT Press.

Davidovitch, N. Casakin, H. (2015) Academic Social Climate - A Key Aspect in Architectural Studies. *International Journal of Art & Design Education* 34:2, pages 237-248.

Deakin Crick, R., Broadfoot, P., Claxton, G. (2004) 'Developing an Effective Lifelong Learning Inventory: the ELLI Project', *Assessment in Education: Principles, Policy & Practice*, 11 (3), pp. 247-272.

Department for Culture, Media and Sport (2015) Creative Industries Economic Estimates: Statistical release. January.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/394668/Creative_Industries_Economic_Estimates_-_January_2015.pdf

Devlin, K., 2018. Do more to halt student suicides. *Sunday Express (Ireland)*, 16 September.

Dutton, T. (Ed.) (1991) *Voices in Architectural Education: Cultural Politics and Pedagogy*. New York, Bergin and Garvey.

Eadie, M. 2018. Students face crisis in mental health as debts spiral. *The Herald*, 2 July.

East Anglian Daily Times, 2018. Student mental health forum launched in memory of Charlie, 22. *East Anglian Daily Times*, 26 March

Evesham Journal, 2018. University's work to prevent suicides is shortlisted for THE award. *Evesham Journal*, 7 September.

Farrow, V. (2019) *Mental Health Survey* (e-mail)

Fazakerley, A. 2018. Student mental health: universities could be forced to involve parents; Minister says institutions still not doing enough to help vulnerable young people. *The Guardian*, 9 October.

Fisher, J. E. (2015). Challenges in determining whether creativity and mental illness are associated. *Frontiers in psychology*, 6, 163.

Fisher, T. (1999) Patterns of Exploitation. *Progressive Architecture*, May 1991:9.

Frederickson, M. P. (1992) Gender and Racial Bias in Design Juries. *In: Architectural Education: Where We Are*. Proceedings of the 80th Annual Meeting of the Association of Collegiate Schools of Architecture, held at University of California and University of Arizona.

Giroux, H. A. (1983) *In: Dutton, T. A. (Ed.) (1991) Voices in Architectural Education: Cultural Politics and Pedagogy*. New York, Bergin and Garvey.

Gomez-Lanier, L. (2018). The Role Stress Has on the Creative Process of Problem-Solving Projects: A Case Study of Individuals and Collaboration. *Int'l J. Soc. Sci. Stud.*, 6, 36.

Goodwin, K., 2017. Call for action on student mental health, *The Sunday Herald*, 3 December

Gutman, R. (1988) *Architectural Practice: A Critical View*. New York, Princeton Architectural Press.

Hall, R. 2018. Student suicides: the bereaved father who says data could save lives; James Murray, whose son took his own life, wants universities to use patterns of data to identify struggling students. *The Guardian*, 8 October.

- Hashemi, F. 2018, Huge rise in students in Scotland seeking mental health support, BBC news, 29 October. <https://www.bbc.co.uk/news/uk-scotland-45990384>
- HESA, 2018. Widening participation summary: UK Performance Indicators 2016/2017. 1 February. <https://www.hesa.ac.uk/news/01-02-2018/widening-participation-summary>
- Hohenadel, K. 2018. How architecture builds a profession of stress. Wellcome Collection, 19 December. <https://wellcomecollection.org/articles/XBdyexEAAKsb72Tb>
- Holgate, P. and Jones, P. (2011) 'Care of the Self: embedding well-being into architectural education', Well-being 2011; First International Conference Exploring the Multi-dimensions of Well-being, 18-19 July 2011, Birmingham City University. Available at: [http://nrl.northumbria.ac.uk/6542/1/HOLGATE %26 JONES CARE OF THE SELF EMBEDDING WELL BEING IN ARCHITECTURAL EDUCATION.pdf](http://nrl.northumbria.ac.uk/6542/1/HOLGATE%20JONES%20CARE%20OF%20THE%20SELF%20EMBEDDING%20WELL%20BEING%20IN%20ARCHITECTURAL%20EDUCATION.pdf)
- Holmes, T. H. and Rahe, R. H., 1967. The Social Readjustment Rating Scale. *Journal of Psychosomatic Research*, Volume 11, Issue 2, Pages 213-218.
- Hourigan, N. & McClean, D. *Critical Dialogue in Architecture Studio: Peer Interaction and Feedback*. *Journal for Education in the Built Environment*, Vol 8, Issue 1 (December 2013)
doi:10.11120/jebe.2013.00004
- Hurst, G., 2018a. Bristol fresher is third suspected suicide in month, *The Times*, 11 May.
- Hurst, G., 2018b. Bristol blamed by mother for student's suicide, *The Times*, 11 July.
- Ison, S. (2017) 'The Mental Health and Wellbeing of Architecture Students'; Architects Registration Board Meeting 12/05/2017, Agenda Item 16. <http://www.arb.org.uk/wp-content/uploads/2017/05/Item-16-Mental-Health-and-Wellbeing-of-Architecture-Students.pdf>
- Jenkin, T. 2017. Revealed: The courses which have to pull the most all nighters to get work done. *The Tab*, 23 March. <https://thetab.com/uk/2017/03/24/revealed-courses-pull-nighters-get-work-done-36112>
- Jessel, E. (2018) Architecture school: Only the rich need apply. *Architects' Journal*. Vol.245, Iss.14, pp.10-14.
- Johnson, J. 2018. Prevalence of mental health issues within the student-aged population. *Social mobility & vulnerable learners policy analysis*, 10 September, <https://epi.org.uk/publications-and-research/prevalence-of-mental-health-issues-within-the-student-aged-population/>
- Karklins L and Mendoza J, 2016. Literature Review: Architects and mental health. A report prepared for the NSW Architects Registration Board, ConNetica, Caloundra, Qld. <https://www.architects.nsw.gov.au/download/Architects%20and%20Mental%20health%20FINAL.pdf>
- Kelk, N. J., Luscombe, G. M., Medlow, S., & Hickie, I. B. (2009). *Courting the blues: Attitudes towards depression in Australian law students and lawyers*, BMRI Monograph 2009-1, Sydney: Brain & Mind Research Institute.
- Kirkpatrick, M. (2018). *Mental Wellbeing and the Architecture Student*. MArch Architecture Dissertation, University of Sheffield.
- Koch, A., Schwennsen, K. Dutton, T. A. and Smith, D. (2002) *AIAS Studio Culture Task Force Report*. Washington DC: AIAS.

Kodz J, Davis S, Lain D, Strebler M, Rick J, Bates P, Cummings J, Meager N | Employment Relations Research Series ERRS16 | Department of Trade and Industry | Oct 2003

Kuh, G.D., Kinzie, J, Buckley, J.A., Bridges, B.K., Hayek, J.C. (2006) *'What Matters to Student Success: A Review of the Literature'*. Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success. Available at: nces.ed.gov/npec/pdf/kuh_team_report.pdf (Accessed: 24 July 2019)

Kyaga S, Lichtenstein P, Boman M, Hultman C, Langstrom N, Landen M. (2011) Creativity and mental disorder: family study of 300,000 people with severe mental disorder. *British Journal of Psychiatry*; 199:373.

Kyaga, S., Landén, M., Boman, M., Hultman, C. M., Långström, N., & Lichtenstein, P. (2013). Mental illness, suicide and creativity: 40-year prospective total population study. *Journal of psychiatric research*, 47(1), 83-90.

Leon, J., Linova, R., Squires, J., and Daros, A., 2014. Mental Health Report: Graduate Architecture Landscape and Design Student Union Mental Health Initiative. 6 March. https://issuu.com/joelleon1/docs/galdsu_mentalhealth_report2014?utm_medium=website&utm_source=archdaily.com

Lightfoot, L. 2018. Universities outsource mental health services despite soaring demand; critics say shifting counselling resources into 'wellbeing' is perverse and dangerous when depression and suicide among students are at worrying levels. *The Guardian*, 17 July.

Loughborough University, 2019. Wellbeing Advisers. Counselling and disability Service. <https://www.lboro.ac.uk/services/cds/wellbeing-advisers/>

Low, J. (2019) *Re: Good to see you!* (email)

Manley, S., de Graft-Johnson, A., & Greed, C. (2003). *Why do women leave architecture?* RIBA Technical Report. Available at: <https://www.architecture.com/RIBA/Contactus/NewsAndPress/NewsArchive2002-2012/PolicyNews/Press/2003/WhyDoWomenLeaveArchitectureTheRIB.aspx> (accessed: 15.01 20)

Mark, L. 2017. Women in Architecture survey reveals widening gender pay gap. *Architect's Journal*, 8 February. <https://www.architectsjournal.co.uk/news/women-in-architecture-survey-reveals-widening-gender-pay-gap/10017147.article>

Marsh, S. (2017). Number of university dropouts due to mental health problems trebles. *The Guardian*, 23 May.

Marshall, A. (2019) *Follow up to survey on mental health* (email)

McArdle, H. 2018. Students seeking counselling doubles. *The Herald*, 30 October.

McCann, L. 2018. Figures reveal rise in students seeking mental health help, *Aberdeen Evening Express*, 29 October.

Mental Health Foundation (2016). *Mental Health in Scotland: Fundamental Facts 2016*. Online <https://www.mentalhealth.org.uk/publications/mental-health-scotland-fundamental-facts> [27.11.18]

McClean, D. (2009) *Embedding Learner Independence in Architecture Education: Reconsidering Design Studio Pedagogy*. Unpublished PhD. Robert Gordon University. Aberdeen.

Mental Health Foundation (2018). What is mental health? Online. <https://www.mentalhealth.org.uk/your-mental-health/about-mental-health/what-mental-health> [accessed 28.11.18]

Mesure, S. 2018. University students aren't happy about the amount of work they're getting. They want more. I (Independent print), 9 June.

Mezirow, J. and Associates. (1990) *Fostering Critical Reflections in Adulthood: A Guide to Transformative and Emancipatory Learning*. San Francisco, CA: Jossey-Bass.

Miller, T. W., Bender, B. E. and Schuh, J. H. & Associates (Eds.) (2005) *Promoting Reasonable Expectations: Aligning Student and Institutional Views of the College Experience*, San Francisco: Jossey-Bass.

Mind (2018). Understanding Mental Health. Online. <https://www.mind.org.uk/media/23634461/understanding-mental-health-problems-2018.pdf> [accessed 27.11.18]

Morris, S. 2018. Bristol University did not help suicidal student before she dies, coroner hears, The Guardian, 22 August

Murray, C, 2017. Why do women leave architecture? Because it's a diseased profession, Architect's Journal, 9 February. <https://www.architectsjournal.co.uk/opinion/why-do-women-leave-architecture-because-its-a-diseased-profession/10017140.article>

Mull, R. 2016. We're all to blame for the state of architecture education in the UK, Dezeen, 4 August. <https://www.dezeen.com/2016/08/04/robert-mull-opinion-architecture-education-uk-mental-health-students-volunteering/>

Neale, I., Piggott, L., Honsom, J., and Fagence, S., 2016. Student resilience: unite students insight report. <https://www.unitestudents.com/about-us/insightreport/2016-full-report>

Neves, J., & Hillman, N. (2017). Student academic experience survey. Higher Education Policy Institute and Higher Education Academy, <https://www.hepi.ac.uk/wp-content/uploads/2016/06/Student-Academic-Experience-Survey-2016.pdf>

Newman, V. 2018. Newsletter from The Architects' Mental Wellbeing Forum (AMWF), October 2018. [http://absnet.org.uk/system/files/AMWF%20Newsletter1%20Oct%20201811%20\(2\).pdf](http://absnet.org.uk/system/files/AMWF%20Newsletter1%20Oct%20201811%20(2).pdf)

Newman, V. 2019. Mental health and architects. RIBA website. <https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/mental-health>

NHS (2016) Moodzone: Student Mental Health. <https://www.nhs.uk/conditions/stress-anxiety-depression/student-mental-health/>

NHS England (2018) Mental health. <https://www.england.nhs.uk/mental-health/> Online [accessed 28.11.18]

Nicol, D. and Pilling, S. (Eds.), (2000) *Changing Architectural Education: Towards a New Professionalism*. London, E & F Spon Press.

Ochsner, J. K. (2000) Behind the Mask: A Psychoanalytical Perspective on Interaction in the Design Studio. *Journal of Architectural Education*, 53(4),194-206.

Office for National Statistics [ONS] (2016a) 'Suicides in the UK: 2015 registrations', statistical bulletin. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2015registrations>

Parnell, R. (2001) *It's Good to Talk: Managing Disjunction Through Peer Discussion*, Architectural Education Exchange (AEE) Conference held at Cardiff University, Cardiff.

Parnell, R., Sara, R. with Doidge, C. and Parsons, M. (2007) *The Crit: An Architecture Student's Handbook*. 2nd edition. Oxford: Elsevier.

Pitcher, G. 2018. Mental health hotline for architecture students hit by Sheffield University occupation, 20 March <https://www.architectsjournal.co.uk/news/mental-health-hotline-for-architecture-students-hit-by-sheffield-university-occupation/10029333.article>

Race, P. (2014) *Making Learning Happen: A Guide for Post-Compulsory Education*. 3rd edn. London: Sage.

RIBA, 2018. Students' mental health throughout architecture degrees: Context, causes and consequences. 14 May. <https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/architecture-students-mental-health>

RIBA, 2018b. Architecture apprenticeships update July 2018. <https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/apprenticeships-update-july-2018>

RIBA, 2019a. Pathways to qualify as an architect. <https://www.architecture.com/education-cpd-and-careers/how-to-become-an-architect>

RIBA, 2019b. RIBA Validated schools in the UK. <https://www.architecture.com/education-cpd-and-careers/riba-validation/riba-validated-schools-uk>

Salama, A. and Wilkinson, N. (Eds.) (2007) *Design Studio Pedagogy: Horizons for the Future*, Gateshead, The Urban International Press.

Salama, A. M. and El-Attar, M. S. (2010) Student perceptions of the architectural design jury. *International Journal of Architectural Research*, 4 (2-3). pp. 174-200.

Samaranayake, C. B., & Fernando, A. T. (2011). Satisfaction with life and depression among medical students in Auckland, New Zealand. *Clinical Correspondence*. <https://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2011/vol-124-no-1341/article-samaranayake>

Sang, K., Ison, S., Dainty, A., & Powell, A. (2009). Anticipatory socialisation amongst architects: a qualitative examination. *Education + Training*, 51(4), 309–321. <http://doi.org/10.1108/00400910910964584>

Sang, K. J., Dainty, A. R., & Ison, S. G. (2014). Gender in the UK architectural profession: (re)producing and challenging hegemonic masculinity. *Work, Employment & Society*, 28(2), 247–264. <http://doi.org/10.1177/0950017013491306>

Sara, R. and Parnell, R. (2014) 'Fear and Learning in the Architectural Crit', *Field Journal*, 5(1), pp. 101-125. Available at: [http://www.field-journal.org/uploads/file/2013%20Volume%205/Field%205\(1\)%20Sara%20&%20Parnell.pdf](http://www.field-journal.org/uploads/file/2013%20Volume%205/Field%205(1)%20Sara%20&%20Parnell.pdf)

Sarner, M. 2017. Campus confidential: the counsellors on the frontline of the student mental health crisis; the number of first-year students who disclose a mental health problem has risen five-fold in the past decade. We talk to the experts trying to help, *The Guardian*, 28 October.

Schön, D. A. (1983) *The Reflective Practitioner: How Professionals Think in Action*. Aldershot: Ashgate Publishing Limited.

Schön, D. A. (1985). *The design studio: An exploration of its traditions and potentials*. London: RIBA Publications for RIBA Building Industry Trust.

Scottish Government (2018) *Mental Health in Scotland*. Online. <https://www2.gov.scot/Topics/Health/Services/Mental-Health> [accessed 28.11.18]

Shaffer, D. W. (2003) *Portrait of the Oxford Design Studio: An Ethnography of Design Pedagogy*, WCER Working Paper No. 2003-11. Retrieved on 11.02.04 from: <http://www.wcer.wisc.edu/>

Shulman, L.S. (2005) 'Signature pedagogies in the professions', *Daedalus*, 134 (3), pp. 52-59.

Smith, D., & Lilly, L. (2014). Navigating student stresses in the interface between creative and technological competence: A case study in interior architecture. Sydney, NSW: Australian Government Office for Learning and Teaching.

Smith, D., & Lilly, L. (2016). Understanding Student Perceptions of Stress in Creativity-Based Higher Education Programs: A Case Study in Interior Architecture. *Journal of Interior Design*, 41(2), 39-55.

Steafel, E. 2017. Mother of Oxford student who took his own life calls for overhaul of mental health care in British universities. *The Telegraph*, 11 November

Stevens, G. (1995) 'Struggle in the Studio: A Bourdivin Look at Architecture Pedagogy'. In: *Journal of Architectural Education*, Vol. 49, Issue 2, pp. 105-122

Stevens, G. (1998), *The Favored Circle: The Social Foundations of Architectural Distinction*. Cambridge, MA, MIT Press.

Student Minds (date unknown). Grand challenges in student mental health. https://www.studentminds.org.uk/uploads/3/7/8/4/3784584/grand_challenges_report_for_public.pdf [accessed 28.11.18].

Thorley, C. (2017) Not By Degrees: Improving student mental health in the UK's Universities, IPPR. <http://www.ippr.org/research/publications/not-by-degrees>

Thomas, K. 2018. Mental health at university: know where to find support. *The Guardian*, 14 August.

Till, J. (2004), 'The Lost Judgement', EAAE Writings in Architectural Education Prize, Copenhagen, https://jeremytill.s3.amazonaws.com/uploads/post/attachment/38/2005_Lost_Judgment.pdf

Tinto, V. (1993) *Leaving College: Rethinking the Causes of Student Attrition*, 2nd edition. Chicago:

University of Chicago Press.

Tobin, L. 2018. How to tell which universities are taking student mental health seriously: a guide. *The Guardian*, 29 May.

Tumusiime, H., 2013, April. Learning in architecture: Students' perceptions of the architecture studio. In *Un-common currency: AAE Conference*.

Turner, C., 2017a. Bristol University spends £1 million on 'well-being advisers' amid raft of measures to tackle students' mental health issues, *The Telegraph*, 26 September.

Turner, C. 2017b. Cambridge professor who warned against partying is accused by students of risking mental health damage. *The Telegraph*, 7 November.

UMHAN (2018). <https://www.umhan.com/pages/2-about-umhan>

Universities UK (2015) Student mental wellbeing in higher education: a good practice guide. Online. <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/student-mental-wellbeing-in-he.pdf> [accessed 29.11.18]

Universities UK (2017) Patterns and trends in UK higher education 2017. <https://www.universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Documents/patterns-and-trends-2017.pdf>

University of Newcastle, 2019. Student Support. School of Architecture, Planning and Landscape. <https://www.ncl.ac.uk/apl/study/support/>

UUK, (2019). Higher Education in Numbers. <https://www.universitiesuk.ac.uk/facts-and-stats/Pages/higher-education-data.aspx>

Vaughan, R. 2018. Mental health crisis among students 'must be top priority'. I (Independent Print) 13 August.

Virtanen, P., & Koivisto, A. M. (2001). Wellbeing of professionals at entry into the labour market: a follow up survey of medicine and architecture students. *Journal of Epidemiology & Community Health*, 55(11), 831-835.

Vowles, H. (2000) *The 'Crit' as a Ritualised Legitimation Procedure in Architectural Education*. In: Nicol, D. and Pilling, S. (Eds.), *Changing Architectural Education: Towards a New Professionalism*. London, E & F Spon Press.

Vygotsky, L. (1986) *Thought and Language*. Revised edition. Cambridge, MA, MIT Press.

Waite, R., and Braidwood, E. (2016) Mental health problems exposed by AJ Student Survey 2016. *Architects' Journal*. Vol.243, iss.16, pp.8-12.

Weng, S.C. & Chern, J.Y. (2008). *The 'Night Owl' Learning Style of Art Students: Creativity and Daily Rhythm*. *The International Journal of Art & Design*.

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity*. Cambridge University Press.

Weale, S. 2018a. Bristol University faces growing anger after student suicides, *The Guardian*, 26 May.

Weale, S., 2018b. Student mental health must be top priority – universities minister; Sam Gyimah says issue requires serious leadership from vice-chancellors. *The Guardian*, 28 June.

Webster, H. (2007) *The Analytics of Power: Re-Presenting the Design Jury*. *Journal of Architectural Education*, 60(3), 21-27.

Whelan, J. 2014. Mental Health in Architecture School: Can the Culture Change? ArchDaily, 21 April. <https://www.archdaily.com/498397/mental-health-in-architecture-school-can-the-culture-change/>

WHO (2018a). ICD-11 for mortality and morbidity statistics. Version: June, 22, 2018. Online. [accessed 21.11.18]

WHO (2018b) Mental health: strengthening our response. Fact sheet. Online. <http://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengthening-our-response> [accessed 21.11.18]

Wightwick, A. 2018a. More students seeking help on mental health. *The Western Mail*, 3 March

Wightwick, A. 2018b College wellbeing pilot sees grades dropped for freshers, *The Western Mail*, 19 May.

Wilkin, M. (2000) *Reviewing the Review: An Account of a Research Investigation of the 'Crit'*. In Nicol, D. and Pilling, S. (Eds.) *Changing Architectural Education: Towards a New Professionalism*. London, E & F Spon Press, pp.100-107.

Winston, 2016. Quarter of UK architecture students report mental health issues. *Dezeen*, 29 July. <https://www.dezeen.com/2016/07/29/quarter-uk-architecture-students-mental-health-issues-student-survey-education-architects-journal/>

Woolcock, N., 2018a. Bristol to warn parents of struggling students, *The Times*, 19 May.

Woolcock, N., 2018b. Universities rise to the challenge with more mental health support; Institutions are beginning to recognise the importance of their role in protecting the wellbeing of students. *The Times*; *Good University Guide*, 24 September.

Woolcock, N. 2018c. Parents 'not told of son's mental state'. *The Times*, 20 January.

APPENDIX ONE: REVIEW OF STUDENT MENTAL HEALTH SUPPORT IN UK UNIVERSITIES WITH RIBA VALIDATED ARCHITECTURE COURSES

Institution	Specific Architecture student support? (Y/N)	If yes, what support is offered?	If no, what university-wide support is offered?
The Robert Gordon University (Aberdeen) - The Scott Sutherland School of Architecture and Built Environment	N	-	<ul style="list-style-type: none"> - Student mental health agreement and policy in place - Student Union wellbeing society - Student Counselling and Wellbeing Service (on campus by appointment with Student Wellbeing Advisor) - Disability and Dyslexia Centre - Report and support (for sexual violence and harassment) - Wellbeing events
University of Bath - Department of Architecture and Civil Engineering	N	-	<ul style="list-style-type: none"> - University mental health strategy - Disability team - Counselling and mental health service (online, on campus, and 24-hour service) - Wellbeing service - Mental health first aid course for staff and hotline

The Queen's University of Belfast - School of Natural and Built Environment	N	-	<ul style="list-style-type: none"> - Student mental health policy and guidance - Student wellbeing service (workshops, emergency support during office hours, coaching, drop-in) - Disability services - University health centre
University of Ulster - The Belfast School of Architecture	N	-	<ul style="list-style-type: none"> - Triage - Health and wellbeing advisor (outsourced counselling: access a professional counsellor through a 24/7 freephone helpline or on campus) -Accessibility advisers
Birmingham City University - Birmingham School of Architecture	Y	'Level up team' for pre induction with a 'Student Success Adviser' and several 'Level up mentors' and 'personal tutors', all with experience in the field of architecture education	<ul style="list-style-type: none"> - Mental health policy and guidance - Mental health advisers - Counselling service - Wellbeing advice
The Arts University Bournemouth	N	-	<ul style="list-style-type: none"> - Disability and wellbeing team - Student Wellbeing Officer - Wellbeing drop in support - Support for disability -Counselling service

			<ul style="list-style-type: none"> - Mental health awareness training for staff - Wellbeing events
University of Brighton	Y	<ul style="list-style-type: none"> - Blog posts - Hosted Architecture Student Network Conference in 2015 with mental health as theme - dedicated Student Support and Guidance Tutor (SSGT) for Architecture and Design 	<ul style="list-style-type: none"> - Counselling service - Disability and Dyslexia Team - Mentoring
University of the West of England (Bristol)	N	-	<ul style="list-style-type: none"> - 'Mental Wealth' strategy - Student centre with out-of-hours support staff as well as a student-led telephone support service. - Wellbeing support (Senior wellbeing practitioner) - Counselling (online and on campus and drop in) - Self-help resources - Mentoring - 24-hour textline - Resilience workshops and dedicated resilience officer - anonymous online support platform - disability services - academic personal tutors

			<ul style="list-style-type: none"> - learner analytics software to enable staff to support ‘student progress, wellbeing and mental health’ -self care and wellbeing sessions -
University of Cambridge - Department of Architecture	- N (some colleges have college-based counselling, but architecture dept is not included in this)	-	<ul style="list-style-type: none"> - Disability resource centre - University Counselling service - Mental health advisors - Cambridge University Students’ Union and the Graduate Union has mental health advice - workshops and group sessions run throughout semesters
University for the Creative Arts - Canterbury School of Architecture	N	-	<ul style="list-style-type: none"> - mental health and wellbeing policy - trained mental health first aiders on campus and training for staff - telephone counselling -
University of Kent (Canterbury) - Kent School of Architecture	N	-	<ul style="list-style-type: none"> - wellbeing team - crisis drop-in counselling service - university wellbeing advisers - mentors

			<ul style="list-style-type: none"> - university medical centre and nursing service - e-therapy - wellbeing app - outreach wellbeing adviser
University of Cardiff - The Welsh School of Architecture	N	-	<ul style="list-style-type: none"> - counselling and wellbeing service - mental health advisers - wellbeing appointments - counselling - interactive workshops - courses & groups (eg mindfulness/resilience) - wellbeing champions - student union wellbeing walk-in - student-led nightline
Coventry University - Department of Civil Engineering, Architecture and Building	N	-	<ul style="list-style-type: none"> - Counselling service - mental health advisers - telephone support - short term therapy - postgraduate's guild - triage

			<ul style="list-style-type: none"> - support groups - blog - disability services
University of Dundee - School of Environment	N	-	<ul style="list-style-type: none"> - University counselling service - Disability services - Mentoring for students with mental health difficulties
The University of Edinburgh - Edinburgh School of Architecture and Landscape Architecture (ESALA)	N	-	<ul style="list-style-type: none"> - Counselling services - personal tutors and student support teams - student mental health strategy (and working group) - student counselling - support groups - self-help videos and podcasts - short term counselling - drop in sessions - Students' association guidance - mental health mentor program
University of Strathclyde (Glasgow) - Department of Architecture	N	-	<ul style="list-style-type: none"> - student mental health and wellbeing policy - counselling - online mental health support programme

			<ul style="list-style-type: none"> - Disability and wellbeing service - being well group - everyday mediations - hypnotherapy - action for happiness sessions - Mindfulness sessions - Stress reduction sessions - cognitive therapy sessions - stress busters - positive minds - write to recovery sessions - looking after your mate programme
The Glasgow School of Art - The Mackintosh School of Architecture	N	-	<ul style="list-style-type: none"> - counselling service (short term counselling) - disability service
The University of Huddersfield - School of Art, Design and Architecture	N	-	<ul style="list-style-type: none"> - Student union mental health manifesto - wellbeing and disability services - wellbeing appointments - counselling - lunchtime mental health drop in 'food for thought'

			<ul style="list-style-type: none"> - learn to like yourself workshops - mindful meditation drop in - disability services - back on track support - both wellbeing and mental health advisers - report and support
Hull College - School of Art and Design	N	-	<ul style="list-style-type: none"> - counselling service - disability support
Leeds Beckett University (previously Leeds Metropolitan University) - School of Art, Architecture and Design	N	-	<ul style="list-style-type: none"> - student wellbeing team (counsellors and mental health practitioners) - online counselling and emotional wellbeing platform - stress control classes - support group for survivors of gendered violence - bereavement support group - telephone wellbeing and counselling appointments
De Montfort University - The Leicester School of Architecture	N	-	<ul style="list-style-type: none"> - Mental Health Inclusion Team - counselling (up to 6 appointments)
University of Lincoln - The Lincoln School of Architecture	N	-	<ul style="list-style-type: none"> - Student wellbeing centre - drop in sessions - mental health advisers

			<ul style="list-style-type: none"> - counselling service - disability services - anxiety workshop - exam stress workshop - confidence workshop - getting organised workshop - procrastination workshop - postgraduate workshop
University of Liverpool - Liverpool School of Architecture	N	-	<ul style="list-style-type: none"> - student mental health policy - counselling service -mental health advisory service -Liverpool guild of students' exam Support - disability support - drop in general advice and guidance service
Liverpool John Moores University	N	-	<ul style="list-style-type: none"> - student advice and wellbeing team - student engagement officers - counselling (drop in counselling sessions, by appointment, or online) - mental health adviser

			<ul style="list-style-type: none"> - drop in mental health service - vast array of workshops: managing anxiety; ways to wellbeing; exam stress; PhD student counselling; mindfulness; procrastination and fear of failure; presentation anxiety; building academic confidence; challenging academic perfection; challenging unhelpful thinking and studying habits; conquering exam nerves; how to survive student budgeting.
Architectural Association (London)	N	-	Series of lectures and sessions, one on 'celebrating madness', the other on 'channelling anxiety into creativity'
The London School of Architecture	N	-	-
University College London - The Bartlett School of Architecture	N	-	<ul style="list-style-type: none"> - student mental health policy - union 'heads up' campaign to address need to prioritise mental health at UCL - student psychological services - student disability service - counselling (short term individual counselling, cognitive behavioural therapy) - support group website - 24-hr telephone consultations (outsourced) - dedicated email address for staff to highlight students of concern - drop in sessions - university-developed app-based programme for wellbeing and mental

			<p>health</p> <ul style="list-style-type: none"> - Wardens and Student Residence Advisers (SRAs) - Student Support and Wellbeing Advisers - Guide for staff on how to broach mental health with students - workshops: assertiveness, confidence building, overcoming procrastination and mindfulness meditation
University of the Arts, London - Central Saint Martin's College of Art and Design	N	-	<ul style="list-style-type: none"> - mental health advice service - mental health advisers - disability service - emergency office-hours appointments - counselling service - drop in sessions - produced documentary with VICE about rise of use of Xanax - supported where's your head at campaign to get mental health first aiders into universities and workplaces (UAL has 42 trained mental health first aiders)
The University of East London - School of Architecture, Computing and Engineering	N	-	<ul style="list-style-type: none"> - Personal tutor - peer mentoring system

			<ul style="list-style-type: none"> - disability and dyslexia service - student wellbeing team - daily drop in sessions - counselling services
Falmouth University - School of Architecture, Design and Interiors	N	-	<ul style="list-style-type: none"> - counsellors and counselling - mental health team - cognitive behavioural therapy
University of Greenwich (London) - School of Architecture, Design and Construction	N	-	<ul style="list-style-type: none"> - counselling - telephone assessments - listening ears informal network university staff that are interested in your well-being and offer confidential advice and student support - student wellbeing service - student wellbeing coordinators
Kingston University (London) - School of Architecture and Landscape	N	-	<ul style="list-style-type: none"> - disability and mental health support - wellbeing services - focused counselling - drop in advice - listening sessions - stress management sessions - complementary therapies (outsourced and reduced rates)

			- self help guides
London Metropolitan University - Sir John Cass Faculty of Art, Architecture and Design	N	-	- Mental health policy - counselling service - mental health support -personal development (certificate of 'Personal Development and Emotional Awareness' programme, and workshops on: "exam anxiety, relaxation, stress management, motivation, goal setting etc," - mindfulness group - disability and dyslexia service - support for sexual assault survivors
Royal College of Art (London) - School of Architecture	N	-	- counselling service - disability support
London South Bank University - Engineering, Science and the Built Environment	N	-	- mental health and wellbeing support - discussion with mental health and wellbeing adviser - counselling service (and online service) - learning disabilities support - telephone appointments -wellbeing workshops
The University of Westminster - Department of Architecture	N	-	- Launched task group to bring together London universities to work on mental health crisis

			<ul style="list-style-type: none"> - student union mental health society - counselling services (and group sessions, email counselling, skype sessions) - duty counsellor during business hours for crisis support - workshops - disability learning support - personal tutors - holistic therapy clinic - awarded a HEFCE grant last year to support mental health and wellbeing of postgraduate research students, 2 year initiative, 'Wellbeing When Writing: An intervention programme for tackling mental health and wellbeing issues when arising from the doctoral writing process' featuring a series of reflexive writing workshops, masterclasses on writing, and supervisor forum meetings. (16 other English universities received the grant).
Loughborough University - School of Architecture, Building and Civil Engineering	Y	- each Academic School at Loughborough has a dedicated Wellbeing Adviser"	<ul style="list-style-type: none"> - mental health support team - mental health advisers - reading well books on prescription - medical centre and 'doc ready' service gets students ready to approach their GP about mental health - counselling services - let's talk wellbeing talking therapy service

			<ul style="list-style-type: none"> - disability support - wellbeing information and advisers (each school) - disability mentoring - warden service -union heads up group
University of Manchester and Manchester Metropolitan University - The Manchester School of Architecture	N	-	<ul style="list-style-type: none"> - 'first place in country to offer establish a dedicated centre to help support higher education students with mental health needs' to open 2019-2020 (partnership between region's four universities) features university student GP passport and a more integrated approach with NHS and third sector services. - counselling service -disability advisory and support service - think talk report initiative for discrimination - online CBT programme - vast range of workshops (Coping with Eating Distress/Help Yourself Mindfulness Weekly Sessions Thinking about Leaving? Managing Anger Emotional Freedom Technique ('Tapping') Overcoming Sleep Problems Procrastination

			<p>Looking After Your Mate - supporting a friend in need</p> <p>Managing Stress</p> <p>Positive about Presenting</p> <p>Motivation</p> <p>Exam Workshops)</p> <p>- Range of courses (Overcoming Low Mood</p> <p>Bringing Mindfulness into Everyday Life</p> <p>Coping with Eating Distress/Help Yourself</p> <p>Overcoming Social Anxiety</p> <p>Managing Anxiety</p> <p>Let's Talk Cannabis</p> <p>Worried about Your Drug Use?</p> <p>Let's Talk Alcohol</p> <p>Assertiveness)</p> <p>- wellbeing guidance</p> <p>- open door sessions</p> <p>- counsellors always free at 'ten to the hour'</p>
University of Newcastle upon Tyne - School of Architecture, Planning and Landscape	Y	- 'parenting scheme' peer support	<p>- counselling and mental health support</p> <p>- appointments in business hours</p>

			<ul style="list-style-type: none"> - wellbeing consultancy service - mental health disability support - mental health advisers - mental health practitioners - mental health awareness campaign - union group 'mind the gap'
Northumbria University (Newcastle upon Tyne) - Architecture Department, School of the Built Environment	N	-	<ul style="list-style-type: none"> - counselling and mental health support - appointments with counsellors and mental health practitioners - guided self help appointments (online) - therapeutic workshops - disability support - guide to wellbeing - fast friends - produced self help guides -ask4help online service
University of Nottingham - Architecture and Built Environment	N	-	<ul style="list-style-type: none"> - support for exam stress and pressures - counselling service - mental health advisers - personal tutor system

			- mental health advisory service (referral only)
Nottingham Trent University - School of Architecture, Design and the Built Environment	N	-	- student support services team's mental health support provision won The Times Higher Education Award in 2017. - Mental health support team - disability support - online mental health support system - emotional health advice - look after your mate training - mindfulness walks - annual festival of mental health - wellbeing support - streamlined online referral
Oxford Brookes University - School of Architecture	N	-	- support and wellbeing team - medical centre - counselling (and online, groups and workshops) - self help resources - disability support - union advice service - free mental health e-learning for all staff - tailored support

			<ul style="list-style-type: none"> - vast programme of talks (Stress Management & Positive Mental Wellbeing) Effective Assertive Communications at University Effective Exam and Revision Management Get It Done! Stress Resilience: How to be Successful at Brookes Free Mental Health e-Learning for all University Staff Positive Relationships Natural Mindfulness Emotional Intelligence Adjusting to University: Successfully Managing the Transition to Brookes Managing Presentation Anxiety Working Effectively in Groups at University) - coping well online advice - living well online advice - union mental health campaign and blogs
University of Central Lancashire (UCLAN) - The Grenfell-Baines School of Architecture, Construction and Environment	N	-	<ul style="list-style-type: none"> - counselling, mental health and wellbeing service - counsellors, wellbeing, and mental health advisors - disability support - drop in support

<p>University of Plymouth - Plymouth School of Architecture, Design and Environment</p>	<p>N</p>	<p>-</p>	<ul style="list-style-type: none"> - student and wellbeing policy - mental health support service - mental health support drop in - student wellbeing services - listening post drop in service for students run by trained volunteers - student wellbeing officers - training for staff - wellbeing café - e-counselling - drop in service - 'shine' self help inspiring resources (online) and pamphlet series - relaxation downloads -anytime advice line (outsourced) - union advice -sexual assault advice
<p>University of Portsmouth - Portsmouth School of Architecture</p>	<p>N</p>	<p>-</p>	<ul style="list-style-type: none"> - additional support and disability advice centre - student wellbeing service - union advice service - online CBT

			<ul style="list-style-type: none"> - union guidance -mindfulness drop in -feel good fest - talking change (electronic referral system) - e-learning package for staff to support students who may have mental health issues - wellbeing advice - counselling - mental health advice - what's up anonymous support app ran by wellbeing advisers - wellbeing cafe - wellbeing events and workshops (vast range: cbt skills for life, compassionate mind training, introduction to cbt, from stress to success, keep calm and carry on, getting a better night's sleep, stress less, stay well, a survival guide to panic, be your own best friend: introduction to compassionate mind training, compassionate mind training, mood boost, from procrastination to productivity, escaping the perfectionist trap, managing emotions, living and learning well with autism,
Ravensbourne University London	N	-	<ul style="list-style-type: none"> - disability and learning difficulty support - counselling (student counsellor available 3 days per week) - daily health and wellbeing drop in

University of Reading	N	-	<ul style="list-style-type: none"> - Counselling and wellbeing services - counsellors, mental health advisors and wellbeing advisors - counselling (and phone, skype, group, workshop, online support) - blog - disability support - life tools talks (with certificate if student attends 6 talks) - Peer assisted learning scheme -star mentors
University of Salford	N	-	<ul style="list-style-type: none"> - mental health awareness training for staff - disability and learner support service - counselling and wellbeing service - mental health awareness week with wellbeing events such as (yoga, postgrad lunch, relaxation sessions, mindfulness, walk and talk, death café, meditation workshop, lunch with friends, etc.) -union advice on exam stress, eating disorders, suicide
University of Sheffield - Sheffield School of Architecture	Y	- Dedicated mental health hotline set up for one week after staff occupied arts tower in dispute over pensions barring access to architecture students	<ul style="list-style-type: none"> - student access to mental health support (SAMHS) - online self help - online registration - triage - pdfs such as 'managing stress'

			<ul style="list-style-type: none"> - drop in workshops such as (stress reduction mindfulness session, hypnosis for inner calm and positivity, - counselling service - counselling in groups - self help newsletter - stress control course - anxiety course - low mood course - mental health week - 'Talk model' to help staff navigate conversations about mental health - staff helpline - disability and dyslexia support - looking after your mate guide
Sheffield Hallam University - Department of Architecture and Planning	N	-	<ul style="list-style-type: none"> - Disabled student support - Student wellbeing - counselling - workshops and wellbeing group sessions - online registration for support - mental health support for pre-entry students - Residential wellbeing mentoring programme

(Source: Multiple institution websites)

APPENDIX TWO: SURVEY QUESTIONS

SECTION A

Q1. Please state the name of your institution

Q2. Are you academic or support staff?

Q3. Are you aware of any students in the architecture cohort with a mental health disorder? (tick all that apply)

- Yes – diagnosed
- Yes – suspected mental health disorder
- No
- Don't know

Q4. If yes, approximately what percentage of the student cohort are you aware of in total? (please tick one)

- 5-10%
- 10-20%
- 20-50%
- >50%
- Not applicable

Q5. How many students are in the cohort?

Q6. Do you engage with these students in the capacity of your role (i.e. teaching or support capacity)? (tick all that apply)

- Yes – informally
- Yes - formally
- No
- Not applicable

Q7. If yes, when do you interact with these students? (tick all that apply)

- When teaching
- Personal Tutor appointments
- Drop-in sessions
- Informally
- When referred by other staff
- Self-refer
- Through online referral / portal
- Counselling appointments
- Wellbeing advice sessions/appointments
- Other
- Not applicable

Q8. If yes, how often do you engage with these students?

- Daily
- A few times a week
- A few times a month
- A few times a year
- Rarely
- Not applicable

Q9. What symptoms/features of mental ill-health do students describe? (please tick all that apply)

- Anxiety
- Depression
- Stress related disorder
- Other

Q10. Are you aware of any students who attribute their stress to their course experience?

- Yes
- No
- Don't know

Q11. In comparison to the wider university population, do you think architecture students are more likely to experience mental health issues?

- Yes
- No
- Don't know

Q12. If yes, to what do you attribute this? (please tick all that apply)

- Long working hours
- Heavy workload
- The review / crit / public exposure of work
- Competitive / peer pressure
- Pressure from staff
- Work-life balance
- Cost of study / financial issues
- Family commitments / expectations
- Employment prospects
- Other
- Don't know

Q13. Are you aware of any curriculum changes specifically made at your university to address mental health?

- Yes
- No
- Don't know

Q14. If yes, at what level?

- Institutional
- School / Department
- Course
- Module
- Don't know
- Not applicable

Q15. Which of the following cultural factors such as age, gender or nationality do you observe can have a negative impact on mental health and wellbeing in the study of architecture?

- Age Yes / No
- Gender Yes / No
- Nationality Yes / No

Q16. Based on your observations, do you believe social media has an impact on mental health and wellbeing while studying architecture?

- Yes
- No
- Don't know

Q17. Are you aware of the various levels of support offered to students with mental health concerns at your university?

- Yes
- No
- Don't know
- Partially / to some degree

Q18. What type of training does your university offer you to help you support students with mental health or wellbeing difficulties? (please tick all that apply)

- Mental health first aid training
- Awareness training
- Other mental health and wellbeing support training
- Guidance on how to refer students to internal services
- Guidance on how to refer students to external services
- Other
- Don't know
- None

Q19. What type of support do you offer personally to students with mental health and wellbeing issues? (please tick all that apply)

- Informal (chat/coffee)
- Drop-in/open door sessions
- A more formal meeting to discuss mental health and wellbeing
- Signpost/refer to institution support
- Signpost/Refer to external support

- Discuss the issues in induction / course or year introduction / other teaching time
- Email or telephone support
- None
- Not applicable

Q20. What type of support does your university offer students with mental health and wellbeing issues?

- Counselling 1-2-1
- Counselling group sessions or courses
- Online counselling
- Telephone counselling
- Wellbeing advice 1-2-1
- Wellbeing group sessions (such as confidence workshops, yoga, etc)
- Online wellbeing support
- Telephone wellbeing support
- Peer support system (buddy scheme or similar)
- Signpost and refer to outside resources and support
- Other
- Don't know / not sure
- None

Q21. Does your institution offer specific support to architecture students for their mental health and wellbeing needs?

- Yes
- No
- Don't know

Q22. If yes, what type of support does it offer architecture students specifically? (please tick all that apply)

- Dedicated wellbeing officer for architecture students
- Peer or buddy support system from other architecture students
- Tailored online advice or guidance
- Other
- Not applicable

Q23. Do you think the current level of support is sufficient for architecture students at your university?

- Yes
- No
- Don't know

Q24. Do you believe that the mental health support mechanisms and respective roles of academics and support staff are clearly defined at your university?

- Yes
- No
- Don't know

Q25. Do you believe that you have a legal duty of care towards the mental health and well-being of your students?

- Yes
- No
- Don't know

Section B – Support staff ONLY

These questions relate to students of all programmes that you encounter as part of your institutional role

Q26. Of all the students that you see at your university (i.e. from all courses that you deal with), approximately what percentage attribute their mental health difficulties to their course (in part or in whole)?

- 5-10%
- 10-20%
- 20-50%
- >50%
- Not applicable

Q27. Do you engage with any students (from any subject area) who are having mental health or wellbeing difficulties, but have not been diagnosed or disclosed their condition?

- Yes
- No
- Don't know

Q28. With specific reference to the study of architecture, do you think there are elements of the education process that could cause or exacerbate mental health problems?

- Yes
- No
- Don't know

Q29. Which of the following are the most commonly cited factors? (please rank all that apply, where 1 is the most common)

- Long working hours
- Heavy workload
- Public exposure of work
- Competitive / peer pressure
- Pressure from staff
- Work-life balance
- Cost of study / financial issues
- Family commitments / expectations
- Employment prospects / grade expectations
- Other
- Don't know

APPENDIX 3: SEMI-STRUCTURED TELEPHONE INTERVIEW QUESTIONNAIRE

Mental Health in UK Architecture Education: an analysis of contemporary student well-being

Research Team

Peter Holgate (University of Northumbria) / David McClean (Robert Gordon University)

Phone interview questions: Briefing and Informed Consent

In accordance with GDPR principles, we are required to request your permission to use any data collected from interviews within our research inquiry. This data will only be used for the purposes to which you agree.

The interview has 5 main questions which we will cover over a period of approx. 30-45 minutes, and these are shown below so that you have the opportunity to reflect on them prior to our call. With your agreement, the call will be recorded for transcription purposes, Should we use any direct quotes in the final written report of the study, they will be anonymised and attributed to 'a participant' ensuring that the participant cannot be identified. Once the research is completed the transcripts and recordings will be destroyed.

This interview forms part of a study of student mental health in architecture education, and is intended to be as informal as possible. Consequently, you are invited to share your thoughts, experiences, and views as you wish.

Please highlight and / or strike through responses as appropriate

I confirm that I have read and understand the information dated 03/09/2013 for the above enquiry. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily,

Yes No

I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.

Yes No

I understand that the information generated by this enquiry might inform a publication and I give my permission for it to be considered and used, adhering to strict confidentiality.

Yes No

Signature: _____ Name (please print): _____

Date: _____ Institution: _____

Interview Questions

Our survey identified some key issues that affect the mental health of architecture students through their studies:

heavy workload and the work-life balance / peer pressure, competition and pressure from staff / the expense of the course

1. In your experience and opinion, what can be done to address the issue of students' workload and work-life balance in architecture, and has your curriculum made any positive changes in this area?

2. In your experience and opinion, what can be done to address issues of peer pressure / competition / pressure from staff in architecture education, and has your curriculum made any positive changes in this area?

3. In your experience and opinion, what can be done to address issues of course expense in architecture education, and has your curriculum made any positive changes in this area?

4. What (further) measures do you think might be taken to address negative impacts on students' mental health, in terms of each of the following:

* Learning environments

* Support systems (departmental / institutional / national)

* Curricular design, content, teaching and learning methods in architecture

* Student profiles (gender / race and ethnicity / socio-economic backgrounds / disabilities etc.)

5. Is there anything else that you would like to add regarding the theme of mental health in architecture education?

Reference: Adapted from 'Phone interview briefing and questions on Wellbeing' briefing and question document, by Dr D. Guiney and Dr T. O'Brien